Vol. 10 - Issue s1
May 2024

Editor in Chief:
Vincenzo Solfrizzi

SIGOT

pISSN 2465-1109
eISSN 2465-1397

geriatric care

38° Congresso Nazionale SIGOT

Roma, 22-24 maggio 2024

www.geriatric-care.org

pagepress

SIGOT

Geriatric Care

Geriatric Care

Rivista trimestrale registrata
AGCOM/ROC LOMBARDIA 18881/2015

Direttore Responsabile: Camillo Porta

Published by

PAGEPress Publications
via A. Cavagna Sangiuliani, 5
27100 Pavia, Italy
Tel: +39.0382.1549020
info@pagepress.org – www.pagepress.org

pagepress

Guidelines for Authors

Manuscripts have to be *double-spaced* with *one-inch margins*. *Headings* must be used to designate the major divisions of the paper. To facilitate the review process, manuscripts should contain page and line numbering.

Manuscripts must be written in English. Authors whose native language is not English are strongly advised to have their manuscript checked by a language editing service, or by an English mother-tongue colleague prior to submission. As an option, PAGEPress offers its own professional copyediting service. Professional copyediting can help authors improve the presentation of their work and increase its chances of being taken on by a publisher. In case you feel that your manuscript needs a professional English language copyediting checking language grammar and style, PAGEPress offers a chargeable revision service in a few days. This service is available as well to authors who do not submit their manuscript to our journals. Please contact us to get more detailed information on this service.

The first page must contain: i) title (lowercase), without acronyms; ii) first name and family name of each author, separated by commas; iii) affiliation(s) of each author (in English); iv) acknowledgments; v) full name and full postal address of the corresponding author. Phone, fax number and e-mail address for the correspondence should also be included; vi) three to five key words. The second page should contain: i) authors' contributions, *e.g.*, information about the contributions of each person named as having participated in the study (http://www.icmje.org/#author); ii) disclosures about potential conflict of interests; iii) further information (*e.g.*, funding, conference presentation ...).

If *tables* are used, they should be double-spaced on separate pages. They should be numbered and cited in the text of the manuscript.

If *figures* are used, they must be submitted as .tiff or .jpg files, with the following digital resolution: i) color (saved as CMYK): minimum 300 dpi; ii) black and white/grays: minimum 600 dpi; iii) one column width (8.5 cm) or 2 column widths (17.5 cm). A different caption for each figure must be provided at the end of the manuscript, not included in the figure file. Authors must obtain written permission for the reproduction and adaptation of material which has already been published. A copy of the written permission has to be provided before publication (otherwise the paper cannot be published) and appropriately cited in the figure caption. The procedure for requesting the permission is the responsibility of the Authors; PAGEPress will not refund any costs incurred in obtaining permission. Alternatively, it is advisable to use materials from other (free) sources.

If *abbreviations* are used in the text, authors are required to write full name+abbreviation in brackets [*e.g.* Multiple Myeloma (MM)] the first time they are used, then only abbreviations can be written (apart from titles; in this case authors have to write always the full name).

If *names of equipment or substances* are mentioned in the text, brand, company names and locations (city and state) for equipment and substances should be included in parentheses within the text.

Original Articles (3500 words max, abstract 250 words max, 30 references max, 3/5 tables and/or figures): In general, this kind of publication should be divided into an Abstract, Introduction, Materials and Methods, Results, Discussion, Conclusions and References. A maximum of 10 authors is permitted and additional authors should be listed in an *ad hoc* Appendix.

Reviews (4000 words max, abstract 250 words max, minimum 40 references, 3/5 tables and/or figures): They should be introduced by a general summary of content in the form of an Abstract. Following a short introduction, putting the study into context and defining the aim, reviews will concentrate on the most recent developments in the field. A review should clearly describe the search strategy followed (key words, inclusion, exclusion criteria, search engines, ...). No particular format is required; headings should be used to designate the major divisions of the paper.

Brief Reports (about 2000 words, abstract 150 words max, 20 references max, 3 tables and/or figures): Short reports of results from original researches. They should be introduced by a general summary of content in the form of an Abstract. They must provide conclusive findings: preliminary observations or incomplete findings cannot be considered for publication.

Case Reports (about 1800 words, abstract 150 words max, 15 references max, 1-2 tables and/or 3 figures max): A case report is a detailed narrative of symptoms, signs, diagnosis, treatments and follow-up of one or several patients. Cases that present a diagnostic, ethical or management challenge or highlight aspects of mechanisms of injury, pharmacology and histopathology or are accompanied by a literature review of the topic presented are deemed of particular educational value. They should be divided into: Abstract, Introduction, Case report(s), Discussion, Conclusions and References.

For further details on the specific layout to follow for the different types of papers published by the Journal, please refer to the Section Policies.

References

References should be prepared strictly according to the Vancouver style. References must be numbered consecutively in the order in which they are first cited in the text (not alphabetical order), and they must be identified in the text by Arabic numerals in *superscript*. References in the main text must always be cited after dots and commas. References to personal communications and unpublished data should be incorporated in the text and not placed under the numbered references [Example: (Wright 2011, unpublished data) or (Wright 2011, personal communication)]. Where available, URLs for the references should be provided directly within the MS-Word document. References in the References section must be prepared as follows:

i) more than three authors, cite 3 authors, et al. If the paper has only 4 authors, cite all authors;

ii) title style: sentence case; please use a capital letter only for the first word of the title;
iii) journal titles mentioned in the References list should be abbreviated according to the following websites:
   a. ISI Journal Abbreviations Index (http://library.caltech.edu/reference/abbreviations/);
   b. Biological Journals and Abbreviations (http://home.ncifcrf.gov/research/bja/);
   c. Medline List of Journal Titles (ftp://ftp.ncbi.nih.gov/pubmed/J_Medline.txt);
iv) put year after the journal name;
v) never put month and day in the last part of the references;
vi) cite only the volume (not the issue in brackets);
vii) pages have to be abbreviated, *e.g.*, 351-8.

To ensure the correct citation format, please check your references in the PubMed database (http://www.ncbi.nlm.nih.gov/pubmed).

Examples:

Standard journal article

Halpern SD, Ubel PA, Caplan AL. Solid-organ transplantation in HIV-infected patients. N Engl J Med 2002;347:284-7.

Proceedings

Christensen S, Oppacher F. An analysis of Koza's computational effort statistic for genetic programming. In: Foster JA, Lutton E, Miller J, Ryan C, Tettamanzi AG, eds. Genetic programming. EuroGP 2002: Proceedings of the 5th European Conference on Genetic Programming, 2002 Apr 3-5, Kinsdale, Ireland. Berlin: Springer; 2002. pp 182-91.

Article with organization as author

Diabetes Prevention Program Research Group. Hypertension, insulin, and proinsulin in participants with impaired glucose tolerance. Hypertension 2002;40:679-86.

Books

Murray PR, Rosenthal KS, Kobayashi GS, Pfaller MA. Medical microbiology. 4th ed. St. Louis, MO: Mosby; 2002.

Bjørn Lomborg, ed. RethinkHIV - Smarter ways to invest in ending HIV in Sub-Saharan Africa. Cambridge: Cambridge University Press; 2012.

Meltzer PS, Kallioniemi A, Trent JM. Chromosome alterations in human solid tumors. In: Vogelstein B, Kinzler KW, eds. The genetic basis of human cancer. New York, NY: McGraw-Hill; 2002. pp 93-113.

Peer review policy

All manuscripts submitted to our journal are critically assessed by external and/or in-house experts in accordance with the principles of peer review (http://www.icmje.org/#peer), which is fundamental to the scientific publication process and the dissemination of sound science. Each paper is first assigned by the Editors to an appropriate Associate Editor who has knowledge of the field discussed in the manuscript. The first step of manuscript selection takes place entirely in-house and has two major objectives: i) to establish the article's appropriateness for our journals' readership; ii) to define the manuscript's priority ranking relative to other manuscripts under consideration, since the number of papers that the journal receives is much greater than it can publish. If a manuscript does not receive a sufficiently high priority score to warrant publication, the editors will proceed to a quick rejection. The remaining articles are reviewed by at least two different external referees (second step or classical peer review). Manuscripts should be prepared according to the Uniform Requirements established by the International Committee of Medical Journal Editors (ICMJE) (http://www.icmje.org/#prepare).

Authorship: all persons designated as authors should qualify for authorship according to the ICMJE criteria (http://www.icmje.org/ethical_1author.html). Each author should have participated sufficiently in the work to take public responsibility for the content. Authorship credit should only be based on substantial contributions to i) conception and design, or analysis and interpretation of data; and to ii) drafting the article or revising it critically for important intellectual content; and on iii) final approval of the version to be published. These three conditions must all be met. Participation solely in the acquisition of funding or the collection of data does not justify authorship. General supervision of the research group is not sufficient for authorship. Any part of an article critical to its main conclusions must be the responsibility of at least one author. Authors should provide a brief description of their individual contributions.

Obligation to Register Clinical Trials (http://www.icmje.org/#clin_trials): the ICMJE believes that it is important to foster a comprehensive, publicly available database of clinical trials. The ICMJE defines a clinical trial as any research project that prospectively assigns human subjects to intervention or concurrent comparison or control groups to study the cause-and-effect relationship between a medical intervention and a health outcome. Medical interventions include drugs, surgical procedures, devices, behavioral treatments, process-of-care changes, etc. Our journals require, as a condition of consideration for publication, registration in a public trials registry. The journal considers a trial for publication only if it has been registered before the enrollment of the first patient. The journal does not advocate one particular registry, but requires authors to register their trial in a registry that meets several criteria. The registry must be accessible to the public at no charge. It must be open to all prospective registrants and managed by a non-profit organization. There must be a mechanism to ensure the validity of the registration data, and the registry should be electronically searchable. An acceptable registry must include a minimum of data elements (http://www.icmje.org/# clin_trials). For example, ClinicalTrials.gov (http://www.clinicaltrials.gov), sponsored by the United States National Library of Medicine, meets these requirements.

Protection of Human Subjects and Animals in Research: when reporting experiments on human subjects, authors should indicate whether the procedures followed were in accordance with the ethical standards of the committee responsible for human experimentation (institutional and

national) and with the Helsinki Declaration of 1975 (as revised in 2008). In particular, PAGEPress adopts the WAME policy on Ethics in Research (http://www.wame.org). Documented review and approval from a formally constituted review board (Institutional Review Board - IRB - or Ethics committee) is required for all studies (prospective or retrospective) involving people, medical records, and human tissues. When reporting experiments on animals, authors will be asked to indicate whether the institutional and national guide for the care and use of laboratory animals was followed.

Submission Preparation Checklist

As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.

The submission has not been previously published, nor is it before another journal for consideration (or an explanation has been provided in Comments to the Editor). While the manuscript is undergoing the peer review phase, the authors will not submit the manuscript to another journal without notifying the editor.

The submission file is in Microsoft Word, RTF, or PDF document file format.

We fight plagiarism: please understand that your article will be checked with available tools for discovering plagiarism.

The text is double-spaced; uses a 12-point font; employs italics, rather than quoting/underlining (except with URL addresses); and all figures and tables are placed at the end. If *tables* are used, they should be double spaced on separate pages. They should be numbered and cited in the text of the article. If *figures* are used, they must be submitted as .tiff or .jpg files, with the requested digital resolution. If material which has already been published is used, a copy of the written permission for the reproduction and adaptation has to be provided before publication. The procedure for requesting the permission is the responsibility of the Authors. If *abbreviations* are used in the text, authors are required to write full name+abbreviation in brackets [*e.g.*, multiple myeloma (MM)] the first time they are used, then only abbreviations can be written (apart from titles; in this case authors have to write always the full name).

The text adheres to the stylistic and bibliographic requirements outlined in the Author Guidelines, which is found in About the Journal.

Please read this advice and download associated files. The International Committee of Medical Journal Editors has published in all ICMJE journals an editorial introducing a new "Disclosure Form for Potential Conflict of Interest", with the aim to establish uniform reporting system, which can go over the existing differences in current formats or editors' requests. We at PAGEPress Publications welcome this initiative as a possible uniforming, standardizing way to have this important disclosure authorizing the publications of manuscripts. We are therefore asking you to duly fill in the "Uniform Format for Disclosure of Competing Interests in ICMJE Journals" and upload it on the Web site of the PAGEPress journal your work is involved with or email it back to us, in mind to allow PAGEPress to peer-reviewing your work. The document is in Adobe format, it includes instructions to help authors provide the requested information and the completion procedure is user-friendly. Kindly note that the format have to be completed and signed by each author of the work. We remain waiting for the completed form to proceed with publication. Please be informed that if this Disclosure Form is missing, we will not be able to publish your work.

Copyright Notice

PAGEPress has chosen to apply the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0) to all manuscripts to be published.

An Open Access Publication is one that meets the following two conditions:

1. The author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship, as well as the right to make small numbers of printed copies for their personal use.
2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in a suitable standard electronic format is deposited immediately upon initial publication in at least one online repository that is supported by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable open access, unrestricted distribution, interoperability, and long-term archiving.

Authors who publish with this journal agree to the following terms: 1. Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under a Creative Commons Attribution License that allows others to share the work with an acknowledgement of the work's authorship and initial publication in this journal. 2. Authors are able to enter into separate, additional contractual arrangements for the non-exclusive distribution of the journal's published version of the work (*e.g.*, post it to an institutional repository or publish it in a book), with an acknowledgement of its initial publication in this journal. 3. Authors are permitted and encouraged to post their work online (*e.g.*, in institutional repositories or on their website) prior to and during the submission process, as it can lead to productive exchanges, as well as earlier and greater citation of published work.

POSTER

P01

THREE FRACTURES FOR ONE ORTHOGERIATRIC TEAM: CASE REPORT OF SIMULTANEOUS BILATERAL HIP FRACTURES PLUS UNILATERAL HUMERUS FRACTURE

Liliana Mazza[1], Mariangela Bianchi[2], Gian Luca Pirazzoli[2], Chiara Vettori[2], Paola Zappoli[2], Maria Grazia Prandin[2], Alex Pizzo[3], Giuseppe Melucci[3], Domenico Tigani[3], Fabiola Maioli[2]

[1]UO Ortogeriatria, Ospedale Maggiore di Bologna, [2]UO Ortogeriatria, Ospedale Maggiore di Bologna, [3]UO Ortopedia, Ospedale Maggiore di Bologna, Italy

Simultaneous bilateral hip fractures are rare in the elderly population, particularly in the absence of high energy trauma or metabolic bone disease. This is a case-report of simultaneous bilateral hip fracture and left humerus fracture. An 86-year-old woman was admitted to the Orthogeriatric ward of Maggiore Hospital in Bologna with bilateral hip fracture and left humerus fracture, following two subsequent simple falls from standing height. Her past medical history included diabetes, hypothyroidism, arterial hypertension, hypercholesterolemia, cataract surgery. She presented polypharmacy, taking 8 drugs at home. Before falling, her Activies of Faily Living (ADL) score was 5/6 (episodic urinary incontinence), she was able to walk independently. She did not suffer from cognitive impairment. She was admitted and assessed by the Orthogeriatric team (geriatrician, orthopedic surgeon and anesthetist). The orthopedic surgeons performed total hip arthroplasty on both femurs plus left humeral osteosynthesis with fixation nail in a single-surgery session under general anesthesia. Surgery lasted about 3 hours and a half. During the hospital stay, she presented several clinical issues: uncontrolled diabetes, that required some therapy changes, anemia that required blood transfusions, iron and vitamin supplements, uncontrolled pain that required opioids plus naloxone, constipation that required an adequate medical treatment.Early rehabilitation was started after surgery. The patient managed to walk progressively for longer distances using a walker (60 metres circa before discharge). She was, then, discharged to a rehabilitation centre. We also addressed her to a fracture secondary prevention service, where antiresorptive drugs were prescribed.

REFERENCES
Grisoni N, Foulk D, Sprott D, Laughlin RT. Simultaneous bilateral hip fractures in a level I trauma center. J Trauma 2008;65:132-5.
Giannoudis PV, Cohen A, Hinsche A, Stratford T, Matthews SJ, Smith RM. Simultaneous bilateral femoral fractures: systemic complications in 14 cases. Int Orthop 2000;24:264-7.

P02

DELIRIUM RISK IN THE ELDERLY WITH HIP FRACTURE: A MODEL FOR ANALYSIS AND PREDICTION

Mariangela Bianchi[1], Liliana Mazza[1], Maria Grazia Prandin[1], Alessandro Spighi[1], Marialaura Matacena[1], Domenico Tigani[2], Paola Forti[3], Fabiola Maioli[1]

[1]UO Ortogeriatria, Ospedale Maggiore di Bologna, [2]UO Ortopedia, Ospedale Maggiore di Bologna, [3]Dipartimento di Scienze Mediche e Chirurgiche DIMEC, Università di Bologna, Italy

Hip fractures in the elderly are increasing worldwide. These fractures affect the patient's quality of life, increase the risk of institutionalization and death. Delirium frequently affects these patients, making the functional recovery harder to achieve and leading to clinical complications, dementia, institutionalization and death. An early identification of patients with an increased risk of delirium allows to address prevention strategies, in order to promote patients' wellbeing and reduce healthcare costs.

AIM: The aim of our study was identifying predictors of delirium for hip fractured patients at the time of admittance in the Orthogeriatric ward; in particular, we aimed to assess the association of a high C-reactive protein (CRP)/albumin ratio with the increased incidence of delirium. We included all patients with hip fracture that were admitted to the Orthogeriatric ward of Maggiore Hospital of Bologna from December 2022 to April 2023. We collected information about the Comprehensive Geriatric Assessment (CGA) at the time of admittance and the onset of delirium during the hospital stay. Our sample included 312 patients. Mean age was 86 years (from 75 to 101 years). Most patients were women (75%). The incidence of delirium was 37,1 % (116 patients). Old age, male sex, dementia, Activities of Daily Living (ADL), Clinical Frailty Scale (CFS), history of previous hip fracture and elevated C-reactive protein (C-RP)/albumin ratio were independently associated with the onset of delirium. This study confirms the significant role of the Comprehensive Geriatric Assessment (CGA), done at the time of the patient's admittance to the orthogeriatric ward, to identify delirium predictors.

RESULTS: These results lay the foundations for the construction of a delirium prediction model, that is suitable for the Orthogeriatric ward setting, that requires an approach that is both comprehensive and quick at the same time. We found predictors that are, in fact, simple, rapid and easy to assess; among them, the C-RP/albumin ratio has a promising role as a serum marker, combining inflammation and malnutrition.

REFERENCES
Piscitelli, P., Neglia, C., Feola, M., Rizzo, E., Argentiero, A., Ascolese, M., ... & Tarantino, U. (2020). Updated incidence and costs of hip fractures in elderly Italian population. Aging Clinical and Experimental Research, 32, 2587-2593.
Guzon-Illescas, O., Perez Fernandez, E., Crespí Villarias, N., Quirós Donate,

F. J., Peña, M., Alonso-Blas, C., ... & Mazzucchelli, R. (2019). Mortality after osteoporotic hip fracture: incidence, trends, and associated factors. Journal of orthopaedic surgery and research, 14(1), 1-9.
Bruce, A. J., Ritchie, C. W., Blizard, R., Lai, R., & Raven, P. (2007). The incidence of delirium associated with orthopedic surgery: a meta-analytic review. International psychogeriatrics, 19(2), 197-214.
Kim, H. J., Lee, S., Kim, S. H., Lee, S., Sim, J. H., & Ro, Y. J. (2023). Association of C-reactive protein to albumin ratio with postoperative delirium and mortality in elderly patients undergoing hip fracture surgery: A retrospective cohort study in a single large center. Experimental Gerontology, 172, 112068.

P03

NUTRITIONAL STATUS AND SYMPATHO-VAGAL IMBALANCE IN ELDERLY PATIENTS

Mariapia Calligari[1], Luca Corbia[1], Martina Valentino[1], Maria Perrotti[1], Carmine Dello Russo[1], Marta Zuccarino[1], Stefano Maisto[1], Roberto Vicidomini[2], Valentina Parisi[1], Maddalena Conte[1], Dario Leosco[1], Giuseppe Rengo[1], Laura Petraglia[1], Grazia Daniela Femminella[1]

[1]Department of Translational Medical Science, University of Naples "Federico II", Naples, [2]University of Naples "Federico II", Naples, Italy

BACKGROUND: Sympatho-vagal balance is an expression of the correct functioning of the Autonomic Nervous System (ANS) 1. The analysis of Heart Rate Variability (HRV) by dynamic electrocardiographic recording according to Holter (Holter ECG) over 24 hours allows the evaluation of sympatho-vagal balance. In particular, it is possible to define the low frequency/high frequency ratio (LF/HF Ratio) which is a useful measurement of the activity of the ANS. Higher LF/HF ratios are an expression of sympathetic hyperfunction3. In some pathological conditions, such as obesity-related metabolic and cardiovascular diseases, has been demonstrated the association between autonomic dysfunction and the increased risk of mortality 4. To date there is no clear evidence on the possible correlation between the nutritional status in the elderly patients and the maintenance of sympatho-vagal balance. In geriatrics the simplest tool for nutritional assessment is represented by the Mini Nutritional Assessment (MNA) 5.

AIM: Therefore, the aim of the present study was to correlate the variations in nutritional status, evaluated by MNA, with the sympatho-vagal balance, recorded by 24-hour Holter ECG, in elderly patients.

METHODS: Between May 2023 and March 2024, 71 outpatients were enrolled in the Geriatrics Unit of the University of Naples "Federico II". All Patients underwent 24-h Holter ECG monitoring and MNA administration. Eight patients were excluded due to poor compliance with the procedures required by the study protocol. The evaluation of HRV was carried out through the analysis of the time and frequency domains, based respectively on the measurement of the standard deviation of the intervals between two normal R-R beats (SDNN) and on the LF/HF ratio.

RESULTS: Of the 71 patients enrolled, 28 were women and 41 men and their mean age was 75.16 years±6.5. The mean SDNN value of the study population was 140.99±58.54. The mean LF/HF ratio was 2.64±2.61. The mean MNA value was 23.78±3.77. The non-parametric analysis showed that there was a direct correlation between the nutritional status assessed by MNA score and the LF/HF ratio.

CONCLUSIONS: The present study showed that a good nutritional status in elderly patients is correlated with a physiological sympatho-vagal balance; based on baroreflex control of sympathetic outflow. By confirming these data with a further expansion of the population we could consider MNA a valid clinical tool for the evaluation of the autonomic function, which will also allow to guarantee easy monitoring and improvement of nutritional status in order to promote successful aging.

REFERENCES
1. Dysautonomia: A Forgotten Condition - Part 1.Rocha EA, Mehta N, Távora-Mehta MZP, Roncari CF, Cidrão AAL, Elias Neto J.Arq Bras Cardiol. 2021 Apr;116(4):814-835.
2. Central fatness and risk of all cause mortality: systematic review and dose-response meta-analysis of 72 prospective cohort studies. Jayedi A, Soltani S, Zargar MS, Khan TA, Shab-Bidar S.BMJ. 2020 Sep 23;370.
3. An Overview of Heart Rate Variability Metrics and Norms.Fred Shaffer,J P Ginsberg. Rev 2017 Sep 28(5): 258.
4. Sympathetic nervous system as a target for aging and obesity-related cardiovascular diseases. Balasubramanian P, Hall D, Subramanian M.Geroscience. 2019 Feb;41(1):13-24.
5. The Mini Nutritional Assessment (MNA) and its use in grading the nutritional state of elderly patients B Vellas 1, Y Guigoz, P J Garry, F Nourhashemi, D Bennahum, S Lauque, J L Albarede.Rev. Nutrition 1999 Feb;15(2):116-22.

P04

THE RELATIONSHIP BETWEEN DURATION OF URINARY CATHETERIZATION AND URINARY TRACT INFECTIONS, ACUTE URINARY RETENTION AND DELIRIUM IN OLDER PEOPLE WITH HIP FRACTURE

Gemma Castiello[1], Miranda Foroni[2], Roberta D'Agostino[2], Gloria Franceschini[2], Jovana Milic[2], Giulia Mussatti[2], Giulia Annessi[2], Stefania Rinaldi[3], Giulia Baroncini[3], Chiara Mussi[1], Marco Bertolotti[1], Emilio Martini[1]

[1]UOC Geriatria, Azienda Ospedaliero-Universitaria di Modena, Ospedale Civile di Baggiovara, Reparto di Ortogeriatria, [2]UOC Geriatria, Azienda Ospedaliero-Universitaria di Modena, Ospedale Civile di Baggiovara, Reparto di Ortogeriatria, [3]Servizio Infermieristico, UO Ortopedia Traumatologia e Ortogeriatria, Ospedale Civile di Baggiovara (MO), Italy

BACKGROUND: Adequate management of urinary catheter in older people with hip fracture remains a matter of debate. Longer urinary catheterization is associated with higher risk of urinary tract infections (UTI) and bacteriuria increase of 5% per each day of permanence. Additionally, it is also related to delirium, leading to greater risk of urinary catheter self-removal and ureteral lesions. However, early urinary catheter removal may be associated with acute urinary retention, with a prevalence ranging from 20% to 55%.

OBJECTIVES: The objective of this study was to determine optimal time of total and post-operative urinary catheter removal in older people with hip fracture and its relationship with most common complications, such as UTI, acute urinary retention and delirium.

MATERIALS AND METHODS: This was an observational cross-sectional study including people >65 years with hip fracture admitted to Ortogeriatrics Department of the University Hospital of Baggiovara (Modena, Italy) from 1 May 2023 to 31 Decembre 2023. According to The Diagnostic and Therapeutic Care Pathways (PDTA), patients undergo a surgical intervention within 48 hours and comprehensive geriatric and functional assessment, including Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL), Clinical Frailty Scale (CFS), Cumulative Illness Rating Scale (CIRS). Demographic and clinical data with total and post-operative duration of urinary catheterization, UTI, acute urinary retention and delirium were also collected. UTI were defined as positive urine culture with at least one clinical symptom. Total duration of urinary catheterization was defined as time (in hours) from placement at hospital admission to urinary catheter removal, while post-operative as time (in hours) from the day of surgical intervention to urinary catheter removal. Acute urinary retention was assessed with ultrasound and was defined as presence of at least 400 ml of urine in the bladder. Delirium was evaluated with Confusion Assessment Method (CAM) score ≥4. Outcomes were assessed according to total duration of urinary catheterization (≤96 hours *vs.* >96 hours) and post-operative duration of

urinary catheterization (≤24 hours, >24-48 hours and >48 hours) and were also explored in the univariate analysis.

RESULTS: A total of 199 patients were included, 150 (75%) were females, median age was 84.6 (±7.5) years, 70 (35%) had severe burden of multimorbidity (CIRS-C ≥6), 93 (46.9%) were moderately or severely frail (CFS ≥6), 53 (26.6%) had moderate or severe cognitive deficit (SPMSQ ≥5), 117 (59%) were independent in ADL (score ≥5) and only 56 (28%) were independent in IADL (scores ≥7) activities. Only one patient (0.5%) had permanent urinary catheter before hospital admission. UTI, acute urinary retention and delirium were present in 45 (22.6%), 39 (19.6%) and 54 (27.1%) of people with hip fracture, respectively. At least one complication was present in 81 (40.1%), of which 30 (15.1%) had only one complication, IVU+delirium had 19 (9.9%), IVU+acute urinary retention 12 (6.3%), delirium+acute urinary retention 14 (7.3%), while 6 (3.1%) had all three complications. People with longer duration of post-operative urinary catheterization (>48 hours) had higher prevalence of UTI (42% *vs.* 13% in >24-48 hours and 22% in ≤24 hours; p<0.01) and delirium (44% *vs.* 23% in >24-48 hours and 24% in ≤24 hours; p=0.01), while prevalence of acute urinary retention was similar. People with longer total duration of urinary catheterization (>96 hours) had higher prevalence of UTI (35% *vs.* 16% ≤96 hours; p=0.03) and delirium (34% *vs.* 23% ≤96 hours; p=0.05), while prevalence of acute urinary retention did not differ across time. UTI were mainly caused by Escherichia coli (41.5%), followed by Pseudomonas aeruginosa (17.1%), Enterococcus faecalis (14.6%) e Klebsiella pneumoniae (9.8%). In univariate analysis, total urinary catheterization >96 hours (OR=2.7; 95% CI: 1.4 – 5.4; p=0.004) and post-operative urinary catheterization >48 hours were (OR=3.1; 95% CI: 1.5 – 6.2; p=0.001) associated with UTI. The similar was not confirmed for delirium and acute urinary retention.

CONCLUSIONS: Our study shows that both longer duration of total and post-operative urinary catheterization is associated with UTI in older people with hip fracture, suggesting that urinary catheter should be placed immediately before surgical intervention and not at hospital admission and should be removed on the first post-operative day. Although, due to small sample size, the association between delirium and longer duration of urinary catheterization was not confirmed in the univariate analysis, it should be underlined that urinary catheter should be maintained as short as possible to reduce risk of self-removal.

P05

ORAL ANTICOAGULANTS IN ELDERLY PATIENTS AGED 85 YEARS OR MORE WITH NONVALVULAR ATRIAL FIBRILLATION: FACTORS IN TREATMENT DECISION MAKING

Daniela Ceccarelli-Ceccarelli[1], Gaia Pantieri[2], Giulia Bertaccini[2], Giuseppe Benati[2]

[1]UOC Geriatria, Morgagni, Pierantoni Hospital, Forlì, [2]UOC Geriatria, Morgagni, Pierantoni Hospital, Forlì, Italy

INTRODUCTION: Nonvalvular atrial fibrillation (NVAF) is the most common arrhythmia in older patients.The prevalence of DOACs underprescription in elderly has decreased over the last few years, but older patients are still less likely to receive antithrombotic medications. Risk of bleeding is often considered higher than the risk of stroke irrespective of functional status.

AIMS: Our case series aims to identify to what extent frailty, comorbidities, functional and mobility status affect decision on treatment in NVAF and whether age per se is a barrier to anticoagulation prescription.

MATERIALS AND METHODS: We identified patients admitted to our geriatric unit from January 2023 to April 2023. Selection criteria were: patients aged 85 years or older newly started on anticoagulants in NVAF for primary prevention of cardioembolic events and NVAF confirmed on two or more ECGs performed at least 24 hours apart. We considered only patients naive for anticoagulation and identified cardioembolic and bleeding risk using CHA2DS2-VASc and HAS-BLED scores. Then, we outlined frailty and functional characteristics with assessment of ADL index, mobility status (bedbound, wheelchair bound, walker assisted gait or independent walking) and CIRS-G. Lastly, we observed whether these patients had further hospitalization in the following 12 months, living/death status and major bleeding events.

RESULTS: We identified 22 patients who were prescribed AVK or DOACs in NVAF. Mean age was 89.4 years. 8 patients(36%)were aged 90 years or older; 18 patients, accounting for 81% of cases, had chronic NVAF. The remaining 4 patients showed paroxysmal AF. Analysis on anticoagulant choice showed that 50% of patients were prescribed edoxaban and 32% were prescribed apixaban. Only a patient was started on dabigatran and 3 patients were started on AVK.Mean CHA2DS2-VASc score was 4.8; mean HAS-BLED score was 2.5; 86.3% of subjects had a CHA2DS2-VASc score of 4 or more. Functional status profiling identified 3 patients with ADL 0/6, 1 patients with ADL 1/6, 6 patients with ADL 2/6, 2 patients with ADL 3/6, 1 patient with ADL 4/6, 3 patients with ADL 5/6, 6 patients with ADL 6/6. In order to understand whether mobility status affects decision making, we classified our cases as follows: bedbound (9%), wheelchair-bound(18%), walking with aids (41%), walking with no aids (32%). Then, we determined for each patient: hospital admissions within the first 12 months from start of treatment, major bleeding events and alive/deceased status. Among our 22 patients population, 14 patients (63.6%) were alive with no evidence of further hospital admission; 3 patients were alive with evidence of hospital readmissions (2 patients for causes unrelated to anticoagulation adverse events, 1 patient for traumatic intracerebral bleed); 5 patients deceased (for 2 patients death occurred at hospital readmission and it was unrelated to anticoagulation). It is worth mentioning that age and ADL index in the subgroup alive at 12 months were not necessarily predictive of better safety of anticoagulation treatment: in this subgroup the mean age was 88.6 years and mean ADL index was 3.7 (with a third of patients with ADL index 2 or less). In the same subset, comorbidity burden and mobility status appeared to be more appropriate criteria to guide decision making on anticoagulation: mean CIRS-G score in this subset was 8.5; 11 out of 14 patients were still able to walk independently (with or without aids).

CONCLUSIONS: In our practice decision on starting anticoagulation in NVAF is guided by thromboembolic risk and functional status assessment and age per se is not a barrier to prescription; our practice is aligned with current international guidelines recommending that elderly age should not be considered as the sole factor limiting treatment. Our choice on the type of DOACs is consistent with evidence that edoxaban or apixaban are safer in elderly population. Edoxaban and apixaban have also been associated with reduction in severe bleeding events in patients at risk of falls. Comprehensive geriatric evaluation and the goal of preventing disability should inform the decision to treat. ADL index is not a reliable measure to guide therapeutic choice. Frailty and risk of falls should also not be barriers to anticoagulation prescriptions except in cases with very limited life expectancy or severe loss of function.

REFERENCES

1. Xia X *et al.* Barriers to prescribing oral anticoagulants to inpatients aged 80 years and older with nonvalvular atrial fibrillation: a cross-sectional study. BMC Geriatr. 2022.
2. Bonanad C *et al.* Oral Anticoagulant Use and Appropriateness in Elderly Patients with Atrial Fibrillation in Complex Clinical Conditions: ACONVENIENCE Study. J Clin Med 2022.

pagepress

P06

PERIOPERATIVE TREND OF THE INFLAMMATORY BIOMARKERS IN OLDER PEOPLE WITH HIP FRACTURE WITH OR WITHOUT INFECTION

Alex Cingi[1], Jovana Milic[1], Igor Patsaryna[1], Rossella Tozzi[1], Claudia Canali[2], Manuela Varani[2], Giulia Lancellotti[1], Marco Bertolotti[1], Chiara Mussi[1], Emilio Martini[1]

[1]UOC Geriatria, Azienda Ospedaliero-Universitaria di Modena, Ospedale Civile di Baggiovara, Reparto di Ortogeriatria, [2]Diagnostic Hematology and Clinical Genomics Laboratory, Department of Laboratory Medicine and Pathology, AUSL/AOU Policlinico, Italy

BACKGROUND: The perioperative course of older patients with hip fracture is often characterized by a high incidence of complications, frequently of infectious nature [1]. Conversely, in this population, a com-mon finding is the nonspecific elevation of inflammatory biomarkers, even in the absence of in-fection. C-reactive protein (CRP) and white blood cell count (WBC) reach high peaks in the majority of older people with hip fracture within the first 2-3 days after surgery [2]. Procalcitonin (PCT) has proven to be an accurate marker in detecting postoperative infection in cardiothoracic, neurosurgical, and abdominal surgery, while studies are still lacking to clarify its role in patients who underwent surgical intervention for hip fracture. Monocyte Distribution Width (MDW) is a new biomarker proposed in the early laboratory identification of sepsis [3]. The data is lacking on its utility in older people with hip fracture. Early identification of perioperative infection in these patients adequate and targeted antibiotic therapy, leading to improved short- and long-term prognosis [4].

OBJECTIVE: The objective of the study was to describe the trends of inflammatory biomarkers, namely CRP, WBC, PCT, and MDW and evaluate their association with infection in older people with hip fracture undergoing surgical intervention. Secondary objective was to determine specificity and sensitivity of these biomarkers in the prediction of infection.

MATERIALS AND METHODS: This was an observational prospective study including people >65 years with hip fracture admitted to Ortogeriatrics Department of the University Hospital of Baggiovara (Modena, Italy) from 1 May 2023 to 22 March 2024. According to The Diagnostic and Therapeutic Care Pathways (PDTA), patients undergo a surgical intervention within 48 hours and comprehensive geriatric and functional assessment, including Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL), Clinical Frailty Scale (CFS), Cumulative Illness Rating Scale (CIRS). Patients were divided into two groups based on the presence or absence of perioperative infection (identified through cultural, radiological, or ultrasound examinations requiring antibiotic treatment). The trends of WBC, CRP, PCT and MDW were evaluated upon admission, on the first and the third postoperative day. Specificity and sensitivity to predict infection was calculated for each of these inflammatory biomarkers, based on pre-defined cut-offs indicating infection (>$10x10^9$/L. for WBC, >15 mg/dl for CRP, >1 ng/ml for PLT and >20 for MDW).

RESULTS: A total of 199 patients were included, 150 (75%) were females, median age was 84.6 (±7.5) years, 70 (35%) had severe burden of multimorbidity (CIRS-C ≥6), 93 (46.9%) were moderately or severely frail (CFS ≥6), 53 (26.6%) had moderate or severe cognitive deficit (SPMSQ ≥5), 117 (59%) were independent in ADL (score ≥5) and only 56 (28%) were independent in IADL (scores ≥7) activities. Peri-operative infections occurred in 73 (36.7%) patients. In detail, people with infection had, although not statistically significant, slightly higher median CRP, WBC, PCT and MDW at all time points. All four inflammatory biomarkers had low sensibility in predict-ing infections, while specificity was high, especially for PCT and CRP. In particular, opti-mal specificity was observed for CRP levels >15 mg/dl at hospital admission (98.1%) and day of surgical intervention (day 0; 95.6%) and PCT >1 ng/ml at day 0 (100%), 1 (93.1%) and 3 (93.8%). Moderate specificity was observed for WBC at day 0 (80.5%) and 3 (86.6%) and MDW at hospital admission (83.3%).

CONCLUSIONS: PCT and CRP showed optimal specificity, while WBC and MDW had moderate specificity in detect-ing infection during the perioperative period in older individuals with hip fractures. This implies that these tests are most effective in accurately identifying individuals without infection. Sensitivity was relatively low, given that these inflammatory biomarkers can also be elevated due to the hip fracture itself and the subsequent surgical intervention. Better understanding of these bi-omarkers should assist physicians in decision making and optimal management of infections in older people with hip fracture.

P07

THE RISK OF MALNUTRITION AND POLYPHARMACY ARE RELATED TO A HIGHER INCIDENCE OF FEMORAL FRACTURES IN A GROUP OF 100 ELDERLY PATIENTS

Domenico Coppola[1], Laura Stephanie Ricci[2], Debora Busni[1], Melissa Righi[1], Giuseppe Benati[1]

[1]AUSL Romagna-Sede Forlì, [2]Università degli Studi di Bologna, Geriatria, Italy

INTRODUCTION: Femoral fractures in the elderly represent a significant health concern due to their prevalence, associated morbidity, and impact on quality of life. These fractures often necessitate surgical intervention and comprehensive rehabilitation, imposing considerable burdens on both patients and healthcare systems. Malnutrition stands out as a significant risk factor for femoral fractures, particularly in the elderly population as reported by Li Y. (Nutr Clin Pract. 2023 Oct). Adequate nutrition is crucial for maintaining bone health and strength, as well as supporting overall musculoskeletal function. In elderly individuals, malnutrition often arises due to various factors, including inadequate dietary intake, poor absorption of nutrients, underlying health conditions, and socio-economic challenges. Additionally, age-related changes in metabolism and appetite can further exacerbate the risk of malnutrition. The intake of more than four medications, known as polypharmacy, can indeed be a risk factor for femoral fractures, especially in the elderly, through several mechanisms: some medications can cause side effects such as dizziness, drowsiness, or muscle weakness, increasing the risk of falls and consequently, fractures; some medications can affect bone health causing loss of bone mineral density or increasing the risk of osteoporosis. Polypharmacy is common among older adults, often due to managing multiple chronic medical conditions.

OBJECTIVES: The aim of this study is to identify the impact of malnutrition risk and polypharmacy on the risk of femoral fracture, also considering the functional status of patients before the event.

MATERIALS AND METHODS: In this retrospective study, we selected 100 patients admitted to the Ortho-geriatric ward at Morgagni-Pierantoni Hospital in Forlì. The patients had been admitted for femoral fracture between January 1st and March 31st 2024. The sample consisted of 68 women and 32 men over the age of 65. We assessed the patients' performance status using the Activities of Daily Living (ADL) scale; we evaluated the risk of malnutrition using the Malnutrition Universal Screening Tool (MUST) and assessed the presence of polypharmacy considering a cut-off of more than 4 medications.

RESULTS: We found that 77 patients (77%) were at high risk of malnutrition (MUST score of 2), while 23 patients (23%) were at low risk of malnutrition (MUST score between 0 and 1). Seventy-nine patients (79%) were administering more than 4 medications at the time of admission, while twenty-one patients (21%) were taking 4 or less than 4 drugs. Regarding the functional status of the patients, it emerged that: 46 patients had intact

ADLs (Activities of Daily Living) at a score of 6/6; 19 patients had ADLs 5/6; 20 patients had ADLs at 3/6; 6 patients had ADLs at 2/6; 9 patients had ADLs at 1/6. Therefore, 65% of the patients had an ADL score greater than or equal to 5.

CONCLUSIONS: With this retrospective study, we observed a significant proportion of patients admitted with femoral fractures were at risk of malnutrition upon admission. These findings are similar to those of Han TS *et al.* (Eur J Clin Nutr. 2021 Apr). Among them, a substantial percentage of these patients were already taking more than four medications before the admission. This finding is consistent with those of Zidrou C *et al.* (J Frailty Sarcopenia Falls. 2022 Jun). Our findings suggest a correlation between the risk of falling leading to femoral fractures and both malnutrition risk and polypharmacy. Despite the majority of femoral fracture patients having relatively preserved functional status (ADL ≥5), the presence of a high risk of malnutrition and the use of more than four medications appear to be notable risk factors for falls and femoral fractures in the elderly population. A comprehensive assessment of health status, including nutritional status, can be crucial in predicting the risk of femoral fracture. Therefore, the assessment of polypharmacy should be included in the evaluation of the risk of femoral fractures in the elderly, and rational deprescribing should be considered to minimize this risk.

P08

CHOLESTATIC JAUNDICE WITHOUT RECOGNIZABLE ETIOLOGY. A CASE REPORT

Francesca Crosta[1], Carlo Sanrocco[2], Annalisa Ceccomancini[1], Luisa Maiorini[1], Donatella Stanziani[1], Anna Leoncavallo[1], Rosa Scurti[1]

[1]Department of Geriatric Unit, Azienda Sanitaria Locale (AUSL) di Pescara, [2]Department of Internal Medicine, Azienda Sanitaria Locale (AUSL) di Pescara, Italy

A 80-year-old male was admitted to the Geriatric Unit of the Pescara hospital with a 1-month history of worsening jaundice without pruritus and abdominal discomfort. He reported intermittent nausea, decreased appetite, and darkening of his urine for two weeks before admission. Past medical history included hypertension and hyperlipidemia. Two months earlier he performed cholecystectomy surgery for stones. He denied any significant alcohol, tobacco, or drug abuse, and had no risk factors for human immunodeficiency virus or chronic viral hepatitis. No new drug therapy has been introduced. Physical examination revealed an icteric patient with right upper quadrant tenderness and hepatosplenomegaly. There were no other significant physical findings. Laboratory tests revealed leucocytosis, elevated alkaline phosphatase, aspartate aminotransferase, total bilirubin, and prothrombin time, with decreased serum albumin level. Alcohol and other toxicology screens were negative. Serum creatinine and blood urea nitrogen were normal, and urinalysis did not reveal blood or leukocytes. Antimitochondrial antibody, antinuclear antibody, antismooth muscle antibody, antineutrophil cytoplasmic antibody, and serologies for acute and chronic viral hepatites were negative. In addition, iron studies, serum ceruloplasmin level were all normal. Ultrasound of the abdomen revealed hepatosplenomegaly (liver measured 18 cm and spleen measured 13 cm), without evidence of intrahepatic or extrahepatic biliary dilatation, cirrhosis, or ascites but it evidenced the presence of hypoechoic lesion of 2 centimetres of diameter in the middle third of the right kidney. Neoplastic markers were negative. Computed tomographic (CT) scan of the abdomen revealed hepatosplenomegaly, and a 2.0 x 3.0 x 2.5 cm exophytic mass arising from the right kidney. A metastatic workup, including a CT scan with intravenous contrast of the chest, abdomen, and pelvis, revealed no evidence of metastatic disease.The patient's clinical condition was stable, and he was discharged home with a plan to arrange for a radical nephrectomy. His symptoms and laboratory values remained unchanged for several weeks until he underwent right radical nephrectomy. Pathology revealed evidence of renal oncocitoma, without evidence of vascular invasion or extracapsular extension. The patient had an uneventful operative course with complete resolution of symptoms by the third postoperative month, and repeat laboratory studies revealed normalization of her liver chemistries. Cholestasis is frequently seen in patients with malignancy. It may be because of external compression of the hepatobiliary tree by an enlarged lymph node, pancreatic, ampullary, gallbladder carcinomas, or widespread hepatic infiltration by hepatoma or metastatic carcinoma. lymphomas, in the absence of primary or metastatic liver disease. Nonmetastatic nephrogenic hepatic dysfunction syndrome (Stauffer's syndrome) is a unique paraneoplastic manifestation of renal cell carcinoma that is usually manifested as anicteric cholestasis. This syndrome was originally described in 1961 by M. H. Stauffer, and is characterized by elevated alkaline phosphatase, erythrocyte sedimentation rate, a-2-globulin, and g-glutamyl transferase, thrombocytosis, prolongation of prothrombin time, and hepatosplenomegaly, in the absence of hepatic metastasis. The underlying pathophysiology of this paraneoplastic manifestation is not fully understood; however, reports have suggested the possible role of interleukin-6 overexpression by the primary tumor. This manifestation is not unique to renal cell carcinoma. It has also been described in patients with leiomyosarcoma, angiosarcoma, malignant hystiocytoma, prostate carcinoma, and bronchial adenocarcinoma. Our patient's presentation had features that were consistent with the icteric variant of Stauffer's syndrome: hepatosplenomegaly, elevated alkaline phosphatase, decreased albumin, and prolonged prothrombin time, in addition to cholestatic jaundice. There was no evidence of liver metastasis by abdominal CT, and histological examination of the tumour revealed no renal vascular or capsular invasion. The improvement in the patient's clinical picture and the normalization of the laboratory parameters after tumour resection suggested Stauffer's syndrome with cholestatic jaundice as the correct diagnosis. This is a rare variant of Stauffer's syndrome supported by oncocytoma as a histopathological variant. Clinicians should be aware of this rare syndrome and its variant, and renal tumours should be included in the differential diagnosis of both icteric and anicteric cholestatic liver disease.

REFERENCES
1. Varoczy L, Gergerly L, Zeher M *et al.* Malignant lymphoma−associated autoimmune diseases: a descriptive epidemiological study. Rheumatol Int 2002; 22: 233-237.
2. Heizmann M, Itin P, Wernli M *et al.* Successful treatment of paraneoplastic pemphigus in follicular NHL with rituximab: report of a case and review of treatment of paraneoplastic pemphigus in NHL and CLL. Am J Haematol 2001; 66: 142-144.
3. Rastetter W, Molina A, White CA. Rituximab: expanding role in therapy for lymphomas and auto−immune disease. Ann Rev Med 2004; 55: 477-503.

P09

MONOCYTE DISTRIBUTION WITH: A PROMISING DELIRIUM MARKER?

Francesca Crosta, Donatella Stanziani, Anna Leoncavallo, Luisa Maiorini, Gianluca Colasante, Lorenza Gaspari, Noemi Ferrante, Rosa Scurti

Department of Geriatric Unit, Azienda Sanitaria Locale (AUSL) di Pescara, Italy

INTRODUCTION: Monocyte distribution with is a blood monocyte morphological parameter that can be easily detected by an automated haemocyte analyser and can provide clinicians with important information about cell volume variability in peripheral blood monocyte populations. Under different stimuli, especially in infectious diseases, the activation of innate immunity is the host's first defence mechanism, and the change in monocyte volume is considered an early indicator reflecting the state of activa-

tion of innate immunity. It has been demonstrated that monocyte distribution width shares a diagnostic performance comparable to that of conventional biomarkers (C-reactive protein and procalcitonin) in sepsis. Delirium is an acute confusional state that is extremely common among hospitalized elders and is strongly associated with poor short-term and long-term outcomes. Although many clinicians think of patients with delirium as being agitated, hyperactive delirium represents only 25% of cases, with the others having hypoactive ("quiet") delirium. Hypoactive delirium is associated with a poorer prognosis, potentially because it is less frequently recognized. Acute illnesses represented a predisposing factor for the onset of delirium, especially in frailty patients. The current literature examining serum biomarkers for delirium provides lack of evidence in this field.

OBJECTIVES: The aim of our study was to assess whether monocyte distribution width value may be related to the presence of delirium independently from the presence of sepsis.

METHODS: Consecutive hospital series of elderly patients referring to our geriatric department from January to March 2024 were assessed daily for delirium using the Confusion Assessment Method. The causes of hospitalization were divided in sepsis, according to SEPSIS 3 criteria, or other causes. Plasma levels of procalcitonin and monocyte distribution width were obtained within 24 hours of enrolment. Delirium type (hyperkinetic, hypokinetic or mixed) was also codified. Other clinical and laboratory data were collected, as potential causes of delirium, such as renal function, sodium value and C-reactive protein.

RESULTS: Thirty-three patients were included in this analysis. The median age of the patients was 85 years. 11 patients had diagnosis of sepsis within 48 hours of admission. The remaining 22 patients had diagnosis of heart failure (5 patients), acute respiratory failure (8 patients), stroke (2 patients) and other causes (7 patients). At the univariate analysis a significant positive association was found between monocyte distribution width and hypokinetic delirium (p=0.04). At the multivariate analyses, higher levels of monocyte distribution width showed trends towards the presence of delirium (p=0.09). In contrast no significant differences were found for other laboratory data.

CONCLUSIONS: Our study points to a positive association between increased of monocyte distribution width and delirium, which is independent from the presence of sepsis. These data suggest that inflammation could play an influential role on the physiopathology of delirium and that monocyte distribution width could be a laboratory parameter easily available for predicting the onset of delirium.

REFERENCES
1. Crouser ED, Parrillo JE, Seymour C, *et al.* Improved early detection of sepsis in the ED with a novel monocyte distribution width biomarker. Chest. 2017;152(3):518-26. https:// doi. org/ 10.1016/j. chest. 2017. 05. 039.
2. Crouser ED, Parrillo JE, Seymour CW, *et al.* Monocyte distribution width: a novel indicator of sepsis-2 and sepsis-3 in high-risk emergency department patients. Crit Care Med. 2019;47(8):1018-25. https:// doi. org/ 10.1097/ CCM. 00000 00000 003799.
3. Bleck TP, Smith MC, Pierre-Louis SJ, Jares JJ, Murray J, Hansen CA: Neurologic complications of critical medical illnesses. Crit Care Med 1993, 21:98-103.
4. Sprung CL, Peduzzi PN, Shatney CH, Schein RM, Wilson MF, Sheagren JN, Hinshaw LB: Impact of encephalopathy on mortality in the sepsis syndrome. The Veterans Administration Systemic Sepsis Cooperative Study Group. Crit Care Med 1990, 18:801-806.

P10

A RARE CASE OF DYSPHAGIA IN ELDERLY PATIENT

Francesca Crosta[1], Carlo Sanrocco[2], Annalisa Ceccomancini[1], Donatella Stanziani[1], Franco Colameco[1], Rosa Scurti[1]

[1]Department of Geriatric Unit, Azienda Sanitaria Locale (AUSL) di Pescara, [2]Department of Internal Medicine, Azienda Sanitaria Locale (AUSL) di Pescara, Italy

A 83−year−old men presented with a 3−month history of worsening odynophagia and weight loss. His past medical history was marked by prostatic cancer, Parkinson disease and hypertensive heart disease complicated by atrial fibrillation.Physical examination revealed dehydrated oral mucosa and oral, nasal and lip hematic crusting. Petechiae on the trunk and legs were also presented. Initial flexible transnasal endoscopy revealed crusts on the right middle turbinate and nasopharynx, as well as diffuse whitish pseudomembrane-covered erosions of almost all the supraglottic area and posterior hypopharyngeal wall. Full blood tests were unremarkable, excepted for increased inflammation indices and creatinine and urea values because of dehydration. All routine and autoimmune−screen blood tests were essentially normal. Oral biopsies revealed fibrin deposits with leucocytes without malignant cells. An empirical treatment with antibiotics and antiviral therapy was unsuccessful. After topical and systemic antifungal agents because of Candida-positive oral swabs were introduced. Endoscopy was then performed in the suspicion of candida esophagitis and it revealed denuded mucosa with overlying slough in the mid−esophagus and haematic mucosal crusts. Fungal hyphae were noted. Biopsies showed only mild, nonspecific inflammation. Immunoblotting studies demonstrated circulating autoantibodies to bullous pemphigoid (BP)180 and laminin 5. A diagnosis of mucous membrane pemphigoid on clinical and immunohistological criteria was made, including diffuse oral, ocular, nasal, cutaneous, pharyngeal and laryngeal involvement. Given the past oncological history and the presence of anti-laminin 5 antibodies, a PET-CT scan was performed and revealed a left supraclavicular and multiple retroperitoneal adenopathies. CT-guided fine-needle biopsies were compatible with diffuse large B−cell lymphoma was diagnosed. Rituximab has been used to treat pemphigus associated with lymphoproliferative disease but unfortunately after few days the patient died for septic shock.

REFERENCES
1. Varoczy L, Gergerly L, Zeher M *et al.* Malignant lymphoma−associated autoimmune diseases: a descriptive epidemiological study. Rheumatol Int 2002; 22: 233-237.
2. Heizmann M, Itin P, Wernli M *et al.* Successful treatment of paraneoplastic pemphigus in follicular NHL with rituximab: report of a case and review of treatment of paraneoplastic pemphigus in NHL and CLL. Am J Haematol 2001; 66: 142-144.

P11

STRENGTHENING OF PHYSICAL PERFORMANCE AFTER AN OCCUPATIONAL THERAPY PROGRAM AIMED AT RISK OF FALL PREVENTION IN ELDERLY PEOPLE AFFECTED BY SEVERE OSTEOPOROSIS

Rossella D'Amico[1], Ferdinando D'Amico[2]

[1]Rehabilitative Medicine Unit IRCCS Oasi Troina Enna, [2]Department of Biomorphological Sciences University of Messina, Italy

OBJECTIVES: This study evaluated the differences in the physical performance and the risk of fall among elderly people affected by severe osteoporosis. At that age falls are frequent and result in a higher risk of morbility and mortality. Statistics show that 72 % of all deceases among the eldest are due to falls.

METHODS: This study includes subjects affected by severe osteoporosis whose age is >85: 27 women (mean age 82+3) and 7 men (mean age 85+2). We discovered a new vertebral fracture after pharmacological treatment for osteoporosis in 10 women and 3 man. 23 women and 4 men showed multiple vertebral fractures (>3). The subjects all assumed Teriparatide (PTH 1-34). According to the design of the study patients underwent the following tests at T0-T24: 1) spine and hip DEXA densitometry; 2) spine X-ray with morphometry; 3) Blood tests (Blood count, Protydogram, Creatinine, Phosphotemia,Calcium, Phosphaturia,

Calciuria, Transaminase, Parathormone, FT3,FT4,TSH). The Short Physical Performance Battery (SPPB) assessed the physical performance through the combination of: 1) a balance test at 3 increasingly difficult positions; 2) a walking test on a 4-metre-course; 3) a stand-up test from a chair. Its final SPPB score was comprised between 0 and 12. The Tinetti balance and gait Scale inspects the balance and the gait and shows a variability in score: score<1 indicates non walking; 2<score<19 walking but with a high risck of fall; score>20 walking with a low risk of fall. Patients thus followed an Occupational Therapy programme including aims like: 1) performing lower limbs mobilization through specific exercises; 2) working on muscle fibers type 2 to counterbalance the muscle loss.

RESULTS: At T0 we considered:1) Short Physical Performance Battery Geriatric: mean score 7 in 73.5% subjects ($p<0.05$); 2) Tinetti balance and gait scale:mean score 8 (higt risk of fall) 84.5% subjects ($p<0.5$); mean score 1 (non walking) 19.3% subjects ($p<0.5$). At T24 we evaluated:1) Short Physical Performance Battery:mean score 9 in 67.3% subjects ($p<0.05$);2) Tinetti balance and gait scale:mean score 14 (high risk of fall) 93.4% subjects ($p<0.5$),mean score 1 (non walking) 7.5% ($p<0.5$). At T24 all subjects showed no new vertebral fractures through spine X-rays and morphometry. All subjects included in the studio were prescribed a home programme of occupational therapy on a 6-month-based verification.

CONCLUSIONS: The study focused on the old oldest affected by severe osteoporosis thus evaluating the incidence of vertebral fractures in the spine region. Since a reduced physical performance and an increasing risk of fall indicate frailty in the elderly affected by severe osteoporosis, after prolonged teliparatide treatment (PTH 1-34), we were able to detect changes in the markers for severity together with the strengthening of physical performance associated with a home programme of occupational therapy.

P12

OCCUPATIONAL THERAPY AFTER FEMUR FRACTURE IN ELDERLY PATIENTS AFFECTED BY SARCOPENIA

Rossella D'Amico[1], Rosetta Grasso[2], Ferdinando D'Amico[3]

[1]Rehabilitative Medicine Unit IRCCS Oasi Troina Enna, [2]Residential and Nursing Home Patti, Messina, [3]Department of Biomorphological Sciences University of Messina, Italy

OBJECTIVES: 73 elderly patients with femur fractures have been evaluated following surgery. The aim of the integrated rehabilitative occupational therapy programme was to evaluate the prevalence of sarcopenia and to reestablish the functional condition prior to femur fracture.

METHODS: Patients have been assessed through a multifaceted (orthopedic-geriatric-rehabilitative) approach using MMSE, BADL, IADL, Barthel Index. Osteoporosis and sarcopenia were assessed through DEXA Bone Densitometry. There they followed an Occupational Therapy (OT) programme including aims like: 1) performing lower limbs mobilization through specific exercises; 2) working on muscle fibers type 2 to counterbalance the muscle loss.

RESULTS: The standing position recovery for 37 patients started within 3 days after prosthesis surgery due to femur fracture. They were dismissed after a 15/25-day hospitalization. 36 elderly subjects recovering from osteosynthesis regained the sitting position in 2-3 days, load tests were made between 7 and 14 days and they left the unit 30/45 days after admittance. At discharge 10 subjects affected by femur fracture and sarcopoenia (mean age 79±4) were moved to the Extended Care Unit for lack of assistance at home. Patients thus followed an Occupational Therapy programme whose main aims were: 1) performing lower limbs mobilization through specific exercises; 2) working on muscle fibers type 2 to counterbalance the muscle loss. The group including patients following the programme was then compared to one including 8 subjects affected by femur fracture and sarcopenia (mean age 78±3) discharged and going home to their caregivers after femur fractures. A 6-month individual occupational therapy programme at the Extended Care Unit showed: 1) improvement in motor skills detected through scales scores (BADL 3.3/6 >4.5/6 - IADL 2.5/8 >5.7/8 - Barthel Index 50/100 >90/100); 2) improvement both in muscle mass and muscle strength.

CONCLUSIONS: Effectiveness of an occupational therapy programme focused on walking ability and muscle strength recovery, including patients discharged after femur fractures and osteosynthesis, was evaluated. The Occupational Therapist approach was customized in order to make the patient regain his self-assurance and independence.

P13

WALKING SPEED AND RISK OF FALL IN ELDERLY PATIENTS WITH COXARTHROSIS

Rossella D'Amico[1], Rosetta Grasso[2], Ferdinando D'Amico[3]

[1]Rehabilitative Medicine Unit IRCCS Oasi Troina Enna, [2]Residential and Nursing Home Patti, Messina, [3]Department of Biomorphological Sciences University of Messina, Italy

OBJECTIVES: This study assessed the variability in walking speed and the risk of fall in elderly people with coxarthrosis. Falls are quite frequent in the eldest and therefore lead to a high risk for morbility and mortality causing death in 72% of all deceases due to falls among all the people.

METHODS: The patients were affected by coxarthrosis and were assessed in the Laboratory of Kinesiology and Occupational Therapy. Design included: 1) Physical Performance Test; 2) Tinetti balance and gait Scale; 3) Grip Force Measure. Patients thus followed an Occupational Therapy programme including aims like: 1) performing lower limbs mobilization through specific exercises; 2) working on muscle fibers type 2 to counterbalance the muscle loss. We studied 13 women (mean age 76±7) and 10 men (mean age 75±6) whose walking speed was <2 (group A). They were compared with a 15 women (mean age 74±6) and 9 men (mean age 76±5) whose walking speed was >2 (group B).

RESULTS: 5 women and 5 men in group A had a 24±4 mean Tinetti score showing a low risk of fall, while 8 women and 6 men had a 14±5 mean score indicating a high risk of fall. In the group B 6 women and 2 men had a 25±3 mean score showing a low risk of fall, while 3 women and 2 men had a 16±3 mean score related to a high risk of fall. The mean grip force score was Kg 17.5 in group A and Kg. 21.0 in group B. In group A patients with a Tinetti score showing a high risk of fall we also detected significant relations between the risk of fall and the grip force score ($p<0.05$). In those subjects belonging to group B the same relation was not significant. We also found out that a minor grip force was directly linked to a higher risk of fall ($p<0.01$). Actually 89% of patients in group A had a grip force score <Kg 16 and a Tinetti score=12 predictive of risk of fall ($p<0.5$).

CONCLUSIONS: This study detected the incidence of fall and of a reduced muscular strength in elderly people with a variability in walking speed. Thus we established a relation between the variability in walking speed, the risk of fall and the reduction of muscular strength.

P14

PREVALENCE OF PERIOPERATIVE COMPLICATIONS AND SHORT- AND MID-TERM MORTALITY IN OLDER PEOPLE WITH HIP FRACTURE

Laura Feltri, Elena Sperti, Asia Franceschin, Jovana Milic, Caterina Rontauroli, Laura Selmi, Marco Bertolotti, Chiara Mussi, Emilio Martini

UOC Geriatria, Azienda Ospedaliero-Universitaria di Modena, Ospedale Civile di Baggiovara, Reparto di Ortogeriatria, Modena, Italy

BACKGROUND: Hip fracture in older people is associated with adverse outcomes, such as increased risk of perioperative complications and mortality. Systemic reviews suggest variable prevalence of medical complications that ranges from 20% to 70%, while short-term and 12-month mortality may reach up to respectively 15% and 35%, higher than the general population of the same age.

OBJECTIVE: The objective of this study was to determine the prevalence of the perioperative complications and both short- (30 days) and mid-term (6 months) mortality in older people with hip fracture.

MATERIALS AND METHODS: This was an observational study including people >65 years with hip fracture admitted to Orthogeriatrics Department of the University Hospital of Baggiovara (Modena, Italy) from 1 May 2023 to 22 March 2024. According to The Diagnostic and Therapeutic Care Pathways (PDTA), patients undergo a surgical intervention within 48 hours and comprehensive geriatric and functional assessment, including Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL), Clinical Frailty Scale (CFS), Cumulative Illness Rating Scale (CIRS). Demographic and clinical data with types of fracture, surgical intervention and perioperative complications were also collected. Perioperative complications were defined as any clinical event occurred from the hospital admission up to 10 days after surgical intervention and included infections (urinary tract infections, biliary tract infections, acute exacerbation of chronic obstructive pulmonary disease (COPD), pneumonia), cardiovascular (acute on chronic heart failure, myocardial infarction, atrial fibrillation, deep vein thrombosis), respiratory (pulmonary embolism), neurologic (delirium, stroke, transitory ischemic attack), gastrointestinal (mechanical and paralytic ileus), renal (electrolyte disbalance) and other complications (major bleeding at any other site). Follow-up data on short- and mid-term mortality were collected via phone call to patients who were previously hospitalized.

RESULTS: A total of 199 patients were included, 150 (75%) were females, median age was 84.6 (±7.5) years, 70 (35%) had severe burden of multimorbidity (CIRS-C ≥6), 93 (46.9%) were moderately or severely frail (CFS ≥6), 53 (26.6%) had moderate or severe cognitive deficit (SPMSQ ≥5), 117 (59%) were independent in ADL (score ≥5) and only 56 (28%) were independent in IADL (scores ≥7) activities. Regarding types of fracture, intertrochanteric fracture (111 patients, 56%) was more common than femoral neck fracture (88 patients, 44%). At hospital admission, 78 (37.4%) already had anemia (hemoglobin <12 g/dL). The most common complication was perioperative blood loss, as all patients experienced significant perioperative blood loss with mean of 1539 (±771) ml, according to formula developed by Lisander, surgical intervention with the greatest perioperative blood loss is intramedullary osteosynthesis with gamma nails (1877±697 ml of blood loss), followed by total/partial hip replacement (1690±630 ml) and internal fixation with screws (914±412 ml). Mean of 1.8 packed red blood units were transfused. Surgical site infection was present in only 3 (1.5%) patients. Observing all medical complications, other than perioperative blood loss, in detail: 112 (60.9%) patients had at least one perioperative complication, while 74 (40%) had two or more. The most common complications were infections, occurred in 72 (39.1%) patients, of which 45 (23.2%), 25 (13.8%) and 2 (1%) were urinary tract, respiratory and biliary tract infections, respectively. Delirium was observed in 51 (27.6%) patients, with 23 (45.3%) experiencing onset before surgical intervention and 28 (54.7%) after. Moreover, hyperactive delirium was present in 30 (60%), hypoactive in 9 (18%), while mixed in 12 (22%) patients. Out of 127 patients with available longitudinal data at 1 and 6 months, overall death from any cause occurred in 3 (2.4%) and 10 (7.9%) after hip fracture.

CONCLUSIONS: High prevalence of perioperative medical complications was observed in older people with hip fracture, consistent with findings from other studies. Perioperative blood loss occurs in all patients with hip fracture, regardless of fracture type or burden of comorbidity and frailty. Among other medical complications, infections, delirium and electrolyte disbalance are most frequent ones. Of note, orthogeriatric model of care including prompt surgical intervention, prophylaxis with low molecular weight heparin and early mobilization has mitigated historically prevalent complications like deep vein thrombosis, pulmonary embolism, and pressure injuries, each occurring in less than 1% of our patients. Longer follow-up is needed to explore long-term health outcomes in older people after hip fracture.

P15

PHYSICAL EXERCISE AND FALLS PREVENTION IN ELDERLY PEOPLE: AN EXAMPLE FROM THE "SCUOLA DEL PASSO"

Umberto Giuseppe Galasso[1], Chiara Di Genova[1], Maura Iacomino[1], Chiara Schipa[1], Raffaella Arnò[2], Elena Del Giudice[2]

[1]Policlinico Umberto I, Unità di Geriatria, Roma, [2]"San Giovanni-Addolorata" Hospital, Geriatric Unit, Roma, Italy

INTRODUCTION: Falling is one of the most serious health risk problems through the world for elderly people. It occur in 30% of adults aged 65 years [1] and in 50% of those over 80 annually. Falls have negative effects on functional independence and quality of life and are associated with increased morbidity, mortality and health related costs. Trials and systematic reviews provide clear evidence that falls in older people can be prevented with appropriately designed intervention programs [2-3-4].The recently update Cochrane systematic review [3] concluded that exercise reduces the risk and rate of falls. Although many risk factors for falls have been identified, intervention trials have found that the effects of exercise as a single falls prevention, are comparable to those from multifaceted interventions [3-5]. Multicomponent exercise programs appear to be the most effective interventions for improving the overall health status in elderly individuals. These programs should be carried out especially in groups, offered by healthcare professional and involving caregivers. According to literature data, "Scuola del Passo" has been created such as a multidimensional and multiprofessional approach based on group-exercise programs aimed to increase physical performance in older adults. The exercise programs are carried out under the supervision of a physiotherapist and require, when possible, the care-giver.

OBJECTIVE: To prove the benefits of "Scuola del Passo" reducing the risk and number of falls and improving quality of life in a population of subjects aged >65.

MATERIALS AND METHODS: We used Comprehensive Geriatric Assessment (CGA) to identified older individuals at risk of fall, admitted to Geriatric Ambulatory. The stratification of fall risk into high-medium-low, was conducted with Timed Up and Go test, Tinetti scale and Short Physical Performance Battery. From December 2022 to April 2024 we enrolled 75 patients aged >65 years (average age 79); were excluded patients with severe cognitive impairment (MMSE <10/30 or CDR >3), age >95 years, symptomatic cardio-respiratory diseases, and severe sensory problems. The participants were subjected to physiatric evaluation and included in working groups. Each working group included 5 older adults who performed exercises (resistance, balance and endurance), upon health professional recommendation, 45 min per session, twice a week for 6 weeks.

The care-givers were involved in the exercise programs. At the end the participants were re-evaluated using CGA.

RESULTS: The "Scuola del Passo" proved to be a useful strategy for primary and secondary prevention of falls and fall-related complications. This protocol improved non-motor-functional aspects such as social relations, self-esteem, anxiety about a possible new fall and quality of life. Actually, the effects of this project in the medium and long term are unknown, but it is possible that upon reaching a motor-functional plateau acquired during the "Scuola del Passo" sessions, maintaining an exercise scheme, even at home setting, may prolong the benefit over time regardless of the risk of falling (low, medium or high).

CONCLUSIONS: In elderly, exercise has been shown to be effective in reducing both the risk of falling, the number of falls and fall-related complications."Scuola del Passo" offers designed exercise programs, that improve quality of life. The duration of these benefits is unknown. Promoting physical exercise projects both at hospital and community level is therefore crucial to counteracting and preventing falls in elderly population. Further study on a larger population are needed to confirm the positive healthcare effects in the short, medium and long term.

REFERENCES
1. Ganz DA, Latham Nk. Prevention o falls in community-dwelling older adults.N Engl j Med 2020; 382(8):734-743.doi:10.1056/NEJMcp 1903252.
2. Sherrington C, Fairhall NJ, Wallabank GK, et al. Exercise for preventing falls in older people living in the community. Cochrane Database Syst Rev. 2019; 1 (1).
3. Gillespie LD, Robertson MC, Gillespie WJ, Lamb SE, Gates S, Cumming RG et al. Interventions for preventing falls in older people living in the community. Cochrane Database Syst Rev 2009;CD007146.
4. Sherrington C, Whitney JC, Lord SR, Herbet RD, Cumming RG, Close JC. Effective exercise for prevention falls:a systematic review and meta-analysis. J Am Geriatric Soc 2008; 56(12):2234-43, doi:10.1111/j.1532-5415.2008.02014.x.
5. Cambell AJ, Robertson MC. Tethinking individual and community fall prevention strategies: a meta-regression comparing single and multifactorial interventions. Age Ageing 2007;36(6): 656-62.doi:10.1093/ageing/afm122.

P16

"TO FEED OR NOT TO FEED? THAT IS THE QUESTION!". PHYSICIAN'S ATTITUDES ON ARTIFICIAL NUTRITION FOR PEOPLE LIVING WITH ADVANCED DEMENTIA IN ITALY: AN ON LINE QUALITATIVE SURVEY IN COLLABORATION WITH SIGOT AND SICP

Giordano Gianotti[1], Rania Abd Alatif[2], Emanuele Cardone[3], Alice Dal Col[4], Luca Ghirotto[5], Federica Negro[6], Vanessa Privitera[7], Anna Varalta[8]

[1]UO Geriatria Azienda Ospedaliero Universitaria, Ferrara, [2]Assistenza Domiciliare AIL, Bologna, [3]Hospice "La Casa di Iris", Piacenza, [4]Nucleo Continuità delle Cure Istituto Oncologico Veneto IRCCS, Padova, [5]Azienda USL-IRCCS, Reggio Emilia, [6]Cure Palliative Domiciliari ANT, Lecce, [7]UniBO, Bologna, [8]UOC Cure Palliative e Hospice AULSS 8 Berica, Vicenza, Italy

BACKGROUND: According to W.H.O., the worldwide number of people living with dementia is expected to increase to 132 million by 2050. More than 80% of patients with advanced dementia have feeding problems such as dysphagia and apraxia that may culminate in malnutrition, weight loss, aspiration and pneumonia. These problems often lead to a dilemma among physicians and families so, despite a lack of evidence to support its use, artificial nutrition (AN) is sometimes considered. The decision-making process around AN may also be influenced by a variety of factors including ethical concerns, unexpected fluctuations of the long terminal phase, sociocultural environment, wishes of the family, lack of advanced directives and many others. This decision-making process is under-explored in Italy.

AIM: To explore the views, experiences and emotions of Italy-based Geriatrics and Palliative Care physicians involved in the decision about withholding or withdrawing AN from patients with advanced dementia.

METHODS: An online national qualitative survey was conducted among Italy-based Geriatrics and Palliative care physicians in May 2023. The survey was initially tested by ten physicians and a 16 item mixed questionnaire was spread via S.I.G.O.T. (Società italiana Geriatria Ospedale Territorio) and S.I.C.P (Società Italiana di Cure Palliative) newsletters and social media accounts (Facebook®, LinkedIn®). Data was analysed using Excel.

RESULTS: 64 questionnaires were completed (36 geriatricians, 46 female, 41 aged less than 50 yo, 57% hospital based physicians). Four themes were identified: considerations, barriers, emotional experience and second thoughts. The physicians' decision to withhold/withdraw AN may be influenced by the international guidelines, the patient's perceived clinical condition and presumed QoL, ethical considerations and multidimensional assessment. Common barriers were identified in a conflictual relationship with the family and within the team, a lack of phycological support, a propensity for invasive procedures in the hospital setting and home-based care issues. The decision-making process is complex and emotionally-demanding, however most of the participants experienced serenity and nearly 90% did not re-evaluate their choice.

CONCLUSIONS: In most cases Italian physicians experienced serenity and did not re-evaluate their choice to withhold/withdraw AN even though the decision-making process is complex and emotionally-demanding.

P17

SARCOPENIA AND CLINICAL OUTCOMES IN ELDERLY CHRONIC OBSTRUCTIVE PULMONARY DISEASE PATIENTS: A PROSPECTIVE COHORT STUDY

Vincenzo Gianturco[1], Bruno Dino Bodini[2], Claudio Ocelli[3], Luigi Gianturco[4]

[1]ASL Roma 5, Coniugi Bernardini Hospital, Tor Vergata University, Rome, [2]ASST-Rhodense. Casati Hospital. UOC Pulmonology. Pulmonary Rehabilitation, Passirana (MI), [3]ASL Roma 5, Coniugi Bernardini Hospital, Palestrina, Rome, [4]Department of Cardio-Thoracic-Vascular Diseases, Foundation IRCCS Cà Granda Ospedale Maggiore Policlinico, Milano, Italy

BACKGROUND AND AIM: The aim of this study was to examine the effects of sarcopenia on clinical features and short-term outcomes in elderly chronic obstructive pulmonary disease (COPD) patients.

MATERIALS AND METHODS: Multicenter cohort study was performed. Elderly COPD patients (age >65) were divided into sarcopenia and non-sarcopenia groups according to the diagnosis of sarcopenia at the first admission. Baseline data, geriatric syndrome, lab indicators and body composition analysis were analyzed. Primary endpoint was occurrence of acute exacerbations (AE) of COPD in the two groups, with an evaluation of all cause-one year-mortality. Cox regression was performed to explain the effect of sarcopenia on COPD patients' prognosis.

RESULTS: 326 subjects (206 men and 120 women) with an average age of 77.4±7.9 years were enrolled, of which 176 patients (53.9%) with sarcopenia. Compared to the non-sarcopenia group, the sarcopenia group showed worse lung function, poor quality of life and higher incidence ratios of frailty. After adjusting by Barthel Index, polypharmacy, comorbidity and age, the incidence of sarcopenia was a significant independent predictor of AE in elderly patients with COPD (HR=2.8, 95% CI: 1.2-6.32, p=0.04). Higher mortality was shown in over 80ys subjects of sarcopenia group (HR 2.1, 95% CI: 1.08-8.67, p=0.048).

CONCLUSIONS: Sarcopenia could increase the risk of acute exacerbations of COPD in the elderly, with a poor prognosis in over 80ys subgroup. Screening for sarcopenia at the admission in hospital could influence management and prognosis of these patients

P18

EFFECTS OF A MULTIMODAL PSYCHOSOCIAL INTERVENTION FOR OLDER ADULTS WITH MILD COGNITIVE IMPAIRMENT: STRENGTH PROJECT

Cinzia Giuli[1], Maria Sole Antolini[1], Elpidio Santillo[2], Paolo Fabbietti[3], Marco Socci[4], Francesco Piacenza[5], Marta Balietti[6]

[1]UOC Geriatria, IRCCS-INRCA, Fermo, [2]UO Cardiologia Riabilitativa, IRCCS-INRCA, Fermo, [3]Centro di Biostatistica ed Epidemiologia Clinica Geriatrica Applicata, IRCCS-INRCA, Ancona, [4]Centro Ricerche Economico-Sociali per l'Invecchiamento, IRCCS-INRCA, Ancona, [5]UOC Tecnologie Avanzate dell'Invecchiamento, IRCCS-INRCA, Ancona, [6]UOC Neurobiologia dell'Invecchiamento, IRCCS-INRCA, Ancona, Italy

INTRODUCTION: Mild cognitive impairment (MCI) is a clinical condition characterized by a slight cognitive deficit. It represents a public health issue that negatively affects older person's quality of life. These subjects can develop into diagnosed dementia. Nevertheless, a positive effect of psychosocial multimodal interventions on cognitive functions, lifestyle, functional and neuropsychological status has been previously demonstrated.

AIM: This study aimed to investigate the effect of a multimodal intervention on cognitive performances, psycho-social, and functional status in a cohort of Italian MCI patients.

MATERIALS AND METHODS: Data were examined using the preliminary analisys from the "STRENGTH Project" (grant number GR-2016–02363041) funded by the Italian Ministry of Health and the Marche Region on 311 community-dwelling Italian older adults affected by MCI (1). All subjects enrolled at the Geriatrics Operative Unit of IRCCS-INRCA (Italian National Research Centres on Aging) in Fermo (Italy) underwent a complete clinical, neuropsychological, biochemical and functional evaluation. Management of cardiovascular and lifestyle-related risk factors was considered. Participants were randomly assigned to (a) the experimental group, which undergo sessions of adapted tango, cognitive stimulation, psycho-education, and engagement in social activities for 6 months, or (b) the control group, which received psycho-education and advice on healthy lifestyle for 6 months. All outcomes were analyzed before intervention (baseline) and immediately after termination (follow-up 1).

RESULTS: Preliminary analysis were conducted on 275 subjects (mean age of 75.4±7.0 years). At baseline, 71.6% of subjects presented subjective memory complaints (SMC), measured by the Memory Complaint Questionnaire (MAC-Q). A beneficial impact on functional status, phonemic verbal fluency and quantification of patient's sleep propensity and disorders was observed in experimental group after the intervention.

CONCLUSIONS: These preliminary results have shown an immediate effect of intervention on some cognitive and functional aspects. Our preliminary findings evidenced that multidisciplinary approach was useful in aging research. Further analysis, including the role of biomarkers, quality of life and lifestyle characteristics will permit the identification of health treatments for management and prevention of cognitive decline and dementia.

REFERENCES

1. Giuli C *et al.* Study of the effects of adapted tango and multidimensional intervention in prevention of dementia in aging: developing healthy lifestyle programs (STRENGTH project)-the experimental protocol of a prospective randomised controlled trial. Aging Clin Exp Res. 2020; 32:2529–2537. doi: 10.1007/s40520-020-01504-4.

P19

IDIOPATHIC NORMAL PRESSURE HYDROCEPHALUS: A CRITICAL ANALYSIS OF ITS UNDERREPRESENTATION ACROSS ITALIAN MEDICAL-SCIENTIFIC SOCIETIES IN THE LAST 5 YEARS

Gianpaolo Petrella[1], Alessandro Pesce[2], Edvige Iaboni[3], Giuseppe Demichele[4], Antonietta Macali[5], Angelo Pompucci[1]

[1]UOC Neurochirurgia, Ospedale "S. M. Goretti", Latina, [2]UOC Neurochirurgia, Policlinico Tor Vergata, Roma, [3]Scuola di Specializzazione in Neurochirurgia, Università degli Studi di Messina, [4]Università Campus Bio-Medico di Roma, [5]Sapienza Università di Roma, Italy

BACKGROUND: The scientific debate concerning clinical, translational and surgical aspects of iNPH could still be limited in respect to the incidence of this condition.

AIM: The aim of this paper is to systematically assess the extent of the debate on INPH in the context of the congresses of the relevant medical and scientific societies in our Country.

METHODS: We thoroughly examined the websites and scientific programmes of 12 leading scientific societies linked to medical specialities involved in diagnosis and management of INPH, among which the neurological, neurosurgical, neurophysiological, rehabilitation medicine and urologic societies. The amount of time (in hours) was examined in a time span of events which took place between 2019 and 2023.

RESULTS: Notably, across 4 years (2019-2023), a total of 7 out of 12 (58.3%) of the aforementioned leading scientific societies dedicated a total of zero minutes to the topic "iNPH", two further societies hosted talks for a total of less than one hours concerning such condition. The amount of time dedicated to giant intracranial aneurysms and vestibular schwannomas was in respect to the incidence of the conditions, significantly longer than the time spent debating on iNPH.

CONCLUSIONS: The results demonstrates that in our country, despite the high and increasing incidence of INPH, the awareness raised on the topic could still be limited, especially compared to other, significantly rarer intracranial conditions such as giant intracranial aneurysms and vestibular schwannomas.

P20

IN 2024 IS NORMAL PRESSURE HYDROCEPHALUS STILL UNDERDIAGNOSED? THE SOCIAL AND ECONOMIC BURDEN OF THE PROBLEM

Gianpaolo Petrella[1], Silvia Ciarlo[1], Edvige Iaboni[2], Giuseppe Demichele[3], Angelo Pompucci[1]

[1]UOC Neurochirurgia, Ospedale "S. M. Goretti", Latina, [2]Scuola di Specializzazione in Neurochirurgia, Università degli Studi di Messina, [3]Università Campus Biomedico di Roma, Italy

BACKGROUND: Normal Pressure Hydrocephalus (iNPH) is typically affects the elderly and, yielding to a cognitive decline, enters in a differential diagnosis with other neurodegenerative conditions. However, it is to consider underdiagnosed: this does not allow the patient to receive the right treatment and significantly affects quality of life and life expectancy.

AIM: The present investigation is a in depth analysis of the real incidence of iNPH in the population of the province of our Hospital (circa 580000 individuals).

METHODS: The first phase of this study was conducted by visualizing a brain CT done in a week on the emergency department. We visualized a total of 548 brain CT scans performed on patients accessing for different complaints in the Emergency Departments of the four hospitals of our network and screened those suspicious for iNPH. Subsequently, the corresponding Emergency Department medical records were investigated,

with the aim of understanding the medical history of each patients in search of elements attributable to an alteration of the CSF dynamics.

RESULTS: The cohort of positive CT scans, according to the radiological and clinical inclusion criteria included 81 patients. Among the reason to require acute medical care, "Fall" was the most common. The period prevalence of CT scans suggestive of iNPH among the patients undergoing CT scans was as high as 14.78%.

CONCLUSIONS: The real incidence of iNPH in the population may be underestimated, and the social burden linked to the assistance of patients suffering from such untreated condition could be significantly relieved.

P21

NORMAL PRESSURE HYDROCEPHALUS DOES NOT MATTER: AN ITALIAN PROSPECTIVE

Gianpaolo Petrella[1], Graziano Taddei[1], Edvige Iaboni[2], Mariasole Gagliano[3], Marco Failla Mulone[3], Angelo Pompucci[1]

[1]UOC Neurochirurgia, Ospedale "S. M. Goretti", Latina, [2]Scuola di Specializzazione in Neurochirurgia, Università degli Studi di Messina, [3]Sapienza Università di Roma, Italy

BACKGROUND: Normal Pressure Hydrocephalus (NPH) is a reversible condition characterized by gait disturbance, dementia, and urinary incontinence. Despite being underdiagnosed, surgical treatment can significantly improve symptoms.

AIM: Previous studies have shown a lack of awareness of NPH among physicians, prompting further investigation into its recognition.

METHODS: A survey was conducted among Italian physicians to assess their awareness of NPH. A 9-point questionnaire was anonymously distributed online to physicians registered with Medical Boards in Italy. Data analysis focused on responses related to NPH knowledge and exposure.

RESULTS: Out of 103 Medical Boards invited, 42 participated, potentially reaching 145,788 physicians. Analysis of 547 valid responses revealed varying levels of awareness across specialties. Neurologists showed higher awareness, but overall exposure to NPH cases in clinical practice was limited.

CONCLUSIONS: The survey highlighted a lack of interest and awareness of NPH among Italian physicians. Recommendations were made to enhance recognition, especially among Family Practitioners and Neurologists. Continuous education efforts are crucial to improve early diagnosis and management of NPH. Efforts by medical boards and specialty societies are needed to increase awareness and ensure timely intervention for NPH patients.

P22

PREVALENCE OF NORMAL PRESSURE HYDROCEFALUS IN PATIENTS WITH FRACTURES

Gianpaolo Petrella[1], Edvige Iaboni[2], Antonietta Macali[3], Eleonora De Candia[3], Davide Floris[3], Gaia Marchiori[3], Angelo Pompucci[1]

[1]UOC Neurochirurgia, Ospedale "S. M. Goretti", Latina, [2]Scuola di Specializzazione in Neurochirurgia, Università degli Studi di Messina, [3]Sapienza Università di Roma, Italy

BACKGROUND: Idiopathic normal pressure hydrocephalus (iNPH) is a form of reversible dementia that affects people over the age of 65. It is a syndrome characterized by dilation of the cerebral ventricles associated to normal intracranial pressure and combined with the clinical presentation of Hakim's triad of symptoms: cognitive impairment, urinary incontinence and gait alterations. Neurosurgical treatment with the implantation of a CSF shunt can significantly improve symptoms. Due to a limited knowledge of the etiopathogenic mechanisms of the disease and the lack of standardized protocols, it is estimated that only 20% of affected patients are recognized and promptly treated.

AIM: The main aim of this study is identified among patients admitted to the Orthopedics department following an accidental fall, those suffering from Idiopathic Normal Pressure Hydrocephalus.

MATERIALS AND METHODS: The study inclusion criteria are: patients of both sexes, age ≥65 years, trauma caused by accidental fall. The time period considered runs from 1 February 2024 to 1 April 2024. Once the patients who met the study inclusion criteria were identified, a survey, consisting of 9 items, was submitted to looking for the presence and severity of the characteristic symptomatic pathology's triad. The survey was submitted to caregivers, when patients suffering from dementia. After the positive survey's score, the patient underwent, if it had not already been carried out in the emergency room, to a brain CT scan, which could show, through specific radiological indexes, the possible presence of ventricular dilatation.

RESULTS: There were 24 patients who met the inclusion criteria in the time period considered. Those, who tested positive on the survey, were 15. The brain CT scans that showed ventricular dilatation were 6.

CONCLUSIONS: The results demonstrated that 25% of patients eligible for the study could be affected by normal pressure hydrocephalus. Furthermore, 40% of brain CT scans, in which dilation of the ventricular system is found, recognizes a clinical picture of dementia. The incidence of normal pressure hydrocephalus is high, but awareness of this pathology in our country is still limited. The objective is to recognize and treat it, preventing falls, as well as the consequences of surgery and hospitalization resulting from the fractures reported.

P23

DYSLIPIDEMIA AND COGNITIVE PERFORMANCE IN OLDER ADULTS: THE IMPACT OF GENDER

Valerio Alex Ippolito, Francesca Mancinetti, Anna Giulia Guazzarini, Ilenia Murasecco, Francesco Melis, Emma Giulia Travaglini, Patrizia Mecocci, Virginia Boccardi

Institute of Gerontology and Geriatrics, Departement of Medicine and Surgery, Santa Maria della Misericordia Hospital, University of Perugia, Italy

INTRODUCTION: Dyslipidemia and cognitive decline are prevalent in older populations, and their incidence increases significantly with age. However, the evidence linking serum lipid levels and cognitive dysfunction in older adults remains unclear or mixed, considering that a gender effect cannot rule out.

AIM: This study aims to explore the connections between lipid profiles and cognitive performances in older persons cognitively healthy (CH), affected by Mild Cognitive Impairment (MCI) or dementia (D).

METHODS: In this cross-sectional study, serum lipids were biochemically measured among 1283 older adults, and cognitive functions were assessed. The cognitive evaluation included the Mini Mental State Examination (MMSE) as a measure of global cognition, the Addenbrooke's Cognitive Examination Revised (ACER) rating scale, and a comprehensive neuropsychological evaluation from the GeriCo 3.0 project.

RESULTS: 1283 (817F/466M) with a mean age of 79±5 years old were included in the study. Among them 247 were CE, 409 and 627 were affected by MCI and D respectively. Total cholesterol levels (TC) resulted positively associated with better cognitive performance in the domain of executive function (β:-0.265,

p=0.013 in Trail Making Test-B) only in men with MCI independent of multiple covariates including age, education, lipid drugs use and BMI (Body Mass Index).

CONCLUSIONS: These results suggested that men older adults with higher TC levels are more likely to have better cognitive function. Taking immoderate cholesterol-lowering drugs among older adults is questionable, and cognitive performance of older adults with lower TC levels deserves more attention.

P24

THE ROLE OF THE OCCUPATIONAL THERAPIST IN IMPROVING THE QUALITY OF LIFE FOR PEOPLE WITH DEMENTIA AND THEIR CAREGIVERS: AN INTEGRATED CARE PROJECT

Marco Calabrese[1], Alessandra Lombardi[2], Angela Manica[2], Simone Cecchetto[3], Anna Casanova[4]

[1]UO Riabilitazione, APSS Trento, [2]CDCD, UO Geriatria, Dipartimento Anziani e Longevità, APSS Trento, [3]Governance Processi delle Professioni Sanitarie, APSS Trento, [4]UO Geriatria, Dipartimento Anziani e Longevità, APSS Trento, Italy

INTRODUCTION: According to the 2019 joint report by the World Health Organization and Alzheimer Disease International, dementia should be identified as a global public health priority, with projections indicating a significant increase in cases in the near future. Current data indicate a considerable impact of dementia in Italy, with an expected 60% increase in cases by 2040. However, despite this growth, the problem of under-diagnosis persists, along with the difficulty of therapeutic intervention once the presence of the disease is identified.

SCOPE: In this critical context, Occupational Therapy proves to be fundamental in addressing dementia. The Community Occupational Therapy in Dementia (COTiD) program has proven to be an effective approach in improving the quality of life for people with dementia and their caregivers. This evidence-based, home-based program actively involves both the patient and the caregiver in the therapeutic process, emphasizing the importance of the social environment in care. The COTiD Program has been successfully implemented in numerous countries, including Italy.

MATERIALS AND METHODS: In Trentino, the "Piano Provinciale Demenze" of the XVI Legislature has further expanded the response of the Provincial Health System by introducing the figure of the occupational therapist within the team of a CDCD. The COTiD intervention model has been partially adapted to current possibilities, and the involvement of the occupational therapist in the dementia care pathway has been implemented through a specific referral protocol, based on inclusion and exclusion criteria identifying patients and caregivers who can benefit from this intervention.

RESULTS: Outcome indicators have returned encouraging data, especially regarding perceived satisfaction during performance in meaningful activities.

CONCLUSIONS: Occupational Therapy emerges as an important resource in dementia management, not only improving the quality of life for patients but also actively supporting caregivers in the care process. The integration of this professional figure into the care plans represents a significant step towards a more comprehensive and effective management of dementia.

P25

RISKS AND BENEFITS OF ORAL ANTICOAGULANT THERAPY IN FRAIL ELDERLY PATIENTS WITH ATRIAL FIBRILLATION

Lorenzo Luppi, Beatrice Cuneo, Gianna Lacerenza, D'Imprima Francesca, Giuseppina Fabbo, Giorgia Melillo, Elena Sperti, Michele Luciani, Valentina Rossi, Alex Cingi, Federica Di Zio, Viola Ansanelli, Noemi Barozzi, Giulia Lancellotti, Olivia Moioli, Marco Bertolotti, Chiara Mussi

Università di Modena e Reggio Emilia, Italy

INTRODUCTION: Deciding whether to use anticoagulant therapy in frail elderly patients with atrial fibrillation (AF) is often challenging as current guidelines are based on a substantially different population compared to that encountered in clinical practice, particularly in the geriatric population. Several studies addressing this issue suggest that the clinical benefit of anticoagulation therapy gradually decreases with increasing age and frailty(1)(2).

PURPOSE OF THE STUDY: The aim of this study is to compare the incidence of bleeding complications with that of ischemic events in patients with atrial fibrillation and the clinical characteristics of patients who develop either complication.

MATERIALS AND METHODS: In this study, 70 patients with AF consecutively admitted to the Department of Geriatrics at Baggiovara Civil Hospital were enrolled from January 2022 to March 2024. The mean age of the patients was 87.19±6.06 years and 61.4% of them were female. Data on demographics, history of ischemic and bleeding events requiring hospitalization, comorbidities, multidimensional assessment, and outcomes at discharge were collected.

RESULTS: Among patients, 14 (20%) had hemorrhagic complications and 7 (10%) had ischemic complications. Mortality one year after admission of our sample was 41%, 9% (29 patients). There was no statistically significant correlation between ischemic or bleeding complications and patient mortality. Only a minority of AF patients were treated with anticoagulant therapy (7%). The most prescribed anticoagulant was apixaban (50%), followed by edoxaban (25%). 100% of bleeding complications occurred in patients treated with anticoagulants, and 85.7% of ischemic complications occurred in patients not receiving therapy.Patients with hemorrhagic complications tended to have a higher degree of frailty at multidimensional assessment (mean ADL 2.71 *vs.* 3.21 ns, mean IADL 1.71 *vs.* 2.32 ns, mean MNAsf 7.92 *vs.* 8.48 ns, mean CFS 6.08 *vs.* 5.96 ns, mean SARC-F 6.46 *vs.* 5.24 ns), while this trend was not observed in patients with ischemic complications.Statistical analysis revealed a trend toward a higher prevalence of certain conditions such as dementia (42.9% *vs.* 39.3%), dyslipidemia (50% *vs.* 33.9%), and diabetes mellitus (42.9% *vs.* 25%) in patients who presented with hemorrhagic complications. Conversely, a significantly higher prevalence of active neoplasia (28.6% *vs.* 4.8%, p=0.020) and history of stroke (57.1% *vs.* 15.9%, p=0.010) was observed in patients with ischemic complications.The only statistically significant finding (p=0.060) was the use of anticoagulants at home, which was lower in patients with ischemic complications.

CONCLUSIONS: The collected data reveal a rather high number of hemorrhagic complications requiring hospitalization in patients with atrial fibrillation undergoing anticoagulant therapy.Moreover, in agreement with some studies (1)(2) and taking into account the limitations of the sample involved, the analysis of the multidimensional assessment suggests that as the degree of frailty of patients increases, the risk of bleeding complications may also increase, thus reducing the net clinical benefit of anticoagulant therapy. In conclusion, assessment of the degree of frailty is very important when deciding whether or not to use anticoagulant therapy, especially in frail patients with some specific comorbidities such as cognitive impairment. Further studies involving samples of frail elderly patients are needed to explore this issue further.

REFERENCES

1. Shah SJ, Singer DE, Fang MC, Reynolds K, Go AS, Eckman MH. Net Clinical Benefit of Oral Anticoagulation Among Older Adults With

Atrial Fibrillation. Circ Cardiovasc Qual Outcomes. 2019 Nov;12(11):e006212. doi: 10.1161/CIRCOUTCOMES.119.006212. Epub 2019 Nov 11. PMID: 31707823; PMCID: PMC7117790.
2. Søgaard M, Jensen M, Højen AA, Larsen TB, Lip GYH, Ording AG, Nielsen PB. Net Clinical Benefit of Oral Anticoagulation Among Frail Patients With Atrial Fibrillation: Nationwide Cohort Study. Stroke. 2024 Feb;55(2):413-422. doi: 10.1161/STROKEAHA.123.044407. Epub 2024 Jan 22. PMID: 38252753.

P26

PATIENTS' USE OF REMOTE VISITS AMONG THE OLDEST-OLD ADULTS AT HIGH RISK OF FRAGILITY FRACTURES

Ilaria Giovanna Macchione[1], Anna Rita Bianco[1], Silvia Brogna[2], Anna Grazia Cocomazzi[1], Valentina Gemo[1], Francesca Mancinetti[1], Federica Perini[1], Chiara Properzi[2], Marco Tagliavento[1], Dionysios Xenos[1], Maria Cristina Ercolani[3], Simona Fabbri[1], Gianluca Casacci[1], Virginia Boccardi[1], Marika Ferracci[1], Sara Ercolani[1], Marta Baroni[1], Patrizia Mecocci[1], Carmelinda Ruggiero[1]

[1]Orthogeriatric Service, Geriatric Unit, Institute of Gerontology and Geriatrics, Department of Medicine, University of Perugia, S. Maria della Misericordia Hospital, Perugia, [2]Orthogeriatric Service, Geriatric Unit, Institute of Gerontology and Geriatrics, Department of Medicine, University of Perugia, S. Maria della Misericordia Hospital, Perugia, [3]Informatic Office, S. Maria della Misericordia Hospital, Perugia, Italy

INTRODUCTION: Telemedicine is increasingly widespread to overcome monitoring barriers associated with monitoring of chronic diseases, including those at high risk for fragility fractures, albeit supported by little evidence so far.

AIMS: We investigated the feasibility and effectiveness of telemedicine in managing patients at high risk for fragility fractures during the lockdown period for COVID-19 and then we evaluated the satisfaction of telemedicine service among patients and caregivers and bone specialists.

MATERIALS AND METHODS: From January 2021 to June 2021 we conducted a prospective observational study in older adults with ongoing drug treatments for secondary prevention of fragility fractures by using tele-health service. Patients with ongoing treatments with denosumab or teriparatide require 6 or 12 months assessment for safety and adherence and according with patients' schedule, a nurse made telephone calls with patients, after explanationof the opportunity to attend the virtual service, booked an agreement about day and time of the visits in a dedicated agenda. The televistsare performed by a dedicated platform ad generated a report with updated medical prescriptions and healthy lifestyle recommendations, that the patients downloaded to forward to their GPs.

RESULTS: 407 subjects were contacted and 352 older patients accepted the virtual approach. The majority of patients (59.88%) are women, aged 81.4±8.8 years old, 90.9% leaves in the same healthcare district of the outpatient clinic. All patients are community dwellings with high level of independence in basic daily activities (49.6% with more than 5 ADL independence and mean ADL 4.27±1.6) and instrumental daily activities (37.8% with more than 6 for all sample and mean IADL equal to 4.21±2.8). The majority of patients (343; 8%) experiences major fragility fractures and less than half of the sample also minor fragility fractures (42.5%; n 173). The most prevalent ongoing antifracture drugs include denosumab (79.6%) followed byteriparatide (12%) andabout 80.6% of patients on antifracture drugs were also taking both calcium and vitamin D supplements and 50.6% plus vitamin D supplements alone. A satisfaction questionnaire about telemedicine has been proposed to patients and bone specialists.

CONCLUSIONS: The telemedicine service may be a great alternative at visit in presence.

P27

A CASE OF SIMULTANEOUS CARDIOEMBOLIC STROKE AND ACUTE MYOCARDIAL INFARCTION

Simona Malservisi[1], Andrea Cascetta[1], Gianfranco Tortorici[2] Alessandra Mollicone[3]

[1]UO Geriatria Ospedale Bentivoglio, AUSL Bologna, [2]UOC Cardiologia Ospedale di Bentivoglio, -AUSL Bologna, [3]Scuola di Specializzazione di Geriatria UniBo, Bologna, Italy

INTRODUCTION: Acute ischemic stroke and acute myocardial infarction are very common conditions in elderly patients that may lead to high mortality, morbidity or permanent disability. Approximately 25% of all ischemic strokes have cardioembolic origin. Although simultaneous onset of both acute ischemic stroke and acute myocardial infarction is uncommon, a cardiac embolism due to the presence of endoventricular thrombus must be considered during the diagnostic process of an acute stroke.

CASE REPORT: MG, a 77-year-old woman, was admitted to our Hospital for accidental, not witnessed fall without loss of consciousness or other warning sympotms (chest pain, cardiopalm, dyspnoea). Upon admission vague neurological symptoms were reported: facial asymmetry and mild aphasia. Her remote pathological history repoted arterial hypertension and hypothyroidism. Her home therapy included antihypertensives and levothyroxine only. Neurological physical examination showed: normal level of conciousness, minor facial paralysis, mild left arm and leg motor drift, left arm ataxia and mild dysarthria (NIHSS=5). The ECG showed sinus rhythm with HR 62/min, transient ST-segment elevation in anterolateral and inferior leads. The laboratory exams showed troponin elevation (TnI 0-3h: 33 → 2610 ng/L), Hb1Ac 40 mmol/mol, Total cholesterol 195 mg/dL, HDL/LDL 64/131 mg/dL, triglycerides 61 mg/dL. The patient underwent coronary angiography showing angiographyc pattern consistent with spontaneous dissection of recurrent apical branch of LAD, without significant atherosclerotic stenosis. Only medical therapy was initiated (antiplatelet therapy with acetylsalicylic acid). The transthoracic echocardiogram has been caried out showing normal left ventricular size with preserved EF (50%), circumscribed area of apical akinesia and/with? a left ventricular apex thrombus. For this reason antiplatelet therapy has been replaced with anticoagulant therapy with VKAs. Regarding the initial neurological picture, brain CT was performed with the finding of a large subacute cortico-subcortical fronto-operculum-insulo-temporal ischemic lesion in the vascular distribution territory of the right middle cerebral artery. Such finding was compatible with a cardioembolic stroke, probably due to the left ventricular thrombus. More diagnostic investigation have been performed, such as Doppler ultrasonography of supra-aortic trunks (no significant stenosis), ECG monitoring and Holter ECG (still being interpreted at discharge). The patient successfully underwent physiotherapy treatment, being able to regain independent ambulation and her previous level of independence. After discharge the patient is still being followed up at our Geriatric-Post-Stroke ambulatory.

CONCLUSIONS: Our case underlines the importance of considering even the most unusual sources of embolism during the diagnostic process of an acute stroke.

It olso highlights how often, in elderly patients, even acute diseases may have an uncommon and atypical presentation.

P28

ABERRANT TELOMERIC STRUCTURES AND SERUM MARKERS OF TELOMERE DYSFUNCTION IN HEALTHY AGING

Francesca Mancinetti[1], Luigi Cari[2], Patrizia Bastiani[1], Michela Scamosci[1], Roberta Cecchetti[1], Giuseppe Nocentini[2], Patrizia Mecocci[1], Virginia Boccardi[1]

[1]Division of Gerontology and Geriatrics, Department of Medicine and Surgery, University of Perugia, Santa Maria della Misericordia Hospital, Perugia, [2]Department of Medicine and Surgery, Section of Pharmacology, University of Perugia, Italy

INTRODUCTION: Telomeres, the protective caps at the ends of chromosomes, undergo a gradual shortening process as individuals age. It is hypothesized that severely shortened and dysfunctional telomeres contribute to the aging process and the onset of age-related diseases in humans. Moreover, recent research suggests that the shortening of telomeres in cultured human cells can be influenced by various replication defects within telomeric repeats, which can be observed on metaphase chromosomes. Furthermore, a growing body of evidence has identified a set of serological markers, including elongation factor 1α (EF-1α), stathmin, and N-acetyl-glucosaminidase, which can indicate telomere dysfunction and DNA damage. These findings underscore the intricate relationship between telomere dynamics, cellular replication processes, and the broader implications for aging and age-related diseases in humans.

OBJECTIVES: This study aimed to investigate the relationship between telomere abnormalities and specific biomarkers detected in blood serum. By examining these two distinct aspects—telomere integrity at the chromosomal level and the presence of specific biomarkers in serum—the study aimed to elucidate potential associations and shed light on the underlying mechanisms linking telomere dysfunction to systemic markers of cellular health and aging.

MATERIALS AND METHODS: Fourteen milliliters of peripheral venous blood were obtained from twenty-two healthy subjects (7 male and 15 female) at different ages (range 26-101 years). Telomere abnormalities have been assessed through fluorescence in situ hybridization (FISH) from peripheral blood mononuclear cells, while EF-1α, stathmin, and N-acetyl-glucosaminidase have been detected in blood serum using enzyme-linked immunosorbent assay (ELISA).

RESULTS: A strong positive correlation between aging and the presence of aberrant telomere structures, sister telomere loss (STL), and sister telomere chromatid fusions (STCF) was detected. When serum markers of telomere dysfunction were correlated with telomere abnormalities, we found that stathmin correlated with total aberrant telomeres structures (r=0.431, p=0.0453) and STCF (r=0.533, p=0.0107).

CONCLUSIONS: These findings suggest that serum stathmin can be considered an easy-to-get marker of telomere dysfunction and may serve as valuable indicators of aging. The comprehensive analysis of telomere abnormalities alongside serum biomarkers offers valuable insights into the complex interplay between cellular processes at the molecular level and their systemic manifestations, thereby contributing to our understanding of aging-related pathophysiology and the development of potential diagnostic or therapeutic strategies.

P29

ROLE OF FERRIC SODIUM EDTA (FERACHEL ORor) IN PATIENTS WITH DYSPHAGIA: SYMPTOMS AND ACCEPTANCE EVALUATION

Nicola Marchitto[1], Paola Tamara Paparello[2], Geimi Kaziu[3], Michele Pironti[4], Annalisa Curcio[5], Gianfranco Raimondi[6], Gabriele Magna[7]

[1]Sapienza Università di Roma, Polo Pontino di Terracina e Fondi, Latina, [2]Associazione Med-Inf, Fondi, Latina, [3]Sapienza Università di Roma, Polo Pontino di Terracina e Fondi, Latina, [4]AQMA Italia S.p.A, Napoli, [5]AQMA Italia S.p.A, Napoli, [6]Sapienza, Università di Roma, Polo Pontino di Terracina e Fondi, Latina, [7]Associazione Scientifica Med-Inf, Italy

BACKGROUND: Anaemia is a clinical condition often present in elderly patients with comorbidities. The increasing longevity of the population, highlighted by the changes in the demographic descriptive representations of the Lexis diagram, makes the presence of dysphagia in the elderly patients usually associated with comorbidities such as cognitive decline, secondary parkinsonism, cerebral ischemic or haemorrhagic events and other neurodegenerative disorders.

AIM: The aim of this study is to evaluate the role of oral soluble Sodium Fe++ EDTA (Ferachel oroR) at a dosage of 1 stick daily administered to elderly patients with anaemia suffering from dysphagia.

MATERIALS AND METHODS: In October 2023, we enrolled 225 elderly patients suffering from anaemia and dysphagia secondary to comorbidities (cognitive impairment, parkinsonism, cerebral ischemia, cerebral haemorrhage other neurodegenerative diseases). The subjects who adhered to the research protocol and provided informed consent to the use of sensitive data for the observational study underwent treatment with oral soluble Ferachel at a dosage of 1 stick pack for a day administered sublingually. During the enrolment period, 3 patients voluntarily interrupted the study, 3 patients were excluded from the data analysis, 2 patients were excluded because under the age of 65 years old and 1 patient for acute anaemia with changes in haemoglobin of 11.8 g /dl to 8.8 g/dl treated with blood transfusion. The follow-up started with 222 subjects, 103 women and 119 men with an average age of 85±14 years. During the subsequent three-month follow-up period, 2 patients (2 women) did not continue outpatient checks for bed rest syndrome; 33 required hospitalization for other comorbidities (18 men and 15 women); 4 patients died (1 man and 3 women) and finally 9 patients did not answer the telephone calls needed for follow-up (3 men and 6 women). Therefore, in October 2023, the study was carried out on a sample of 174 patients, 77 women and 97 men, with mean haemoglobin value of 10.2±1,732 gr/dl and mean serum iron level of 32.5 mg/dl. All subjects were assessed for blood count and serum iron in basal conditions, after 24 days (T1), after 72 days (T2) and after 144 days (T3). A multiple choice evaluation test provided by AQMA S.p.A, were performed to evaluate the symptoms linked to anaemia and the satisfaction of the treatment administered as a sublingual formulation compared to the treatment in tablets or capsules.

RESULTS: The results of the study revealed a statistically significant variation in haemoglobin values with variations from 10.2 gr/dl±1.732 to 11.1 gr/dl±1.692 gr/dl (P <0.001). No statistically significant variation in serum iron values from 32.5 mg/dl to 40.8 mg/dl was found (P=0.226). From the results of the evaluation of symptoms related to anaemia, a statistically significant progressive reduction emerged in the symptoms reported by patients in the four different phases of the study, i.e. in baseline conditions, after 24 days (T1), after 72 days (T2) and finally after 144 days (T3). The data relating to the satisfaction of the oral treatment compared to the tablet or capsule formulation highlighted a statistically significant variation with an average score of 2.414±0.682 in a range from 1 (no difference) to 3 (considerable difference).

DISCUSSION: The study evaluating the treatment of secondary anaemia in patients suffering from dysphagia with the oral soluble Fe++ EDTA formulation (Ferachel oroR) highlighted the statistically significant increase in haemoglobin values after 24 days of treatment and a statistically significant reduction of anaemia-related symptoms over the 6-month follow-up period. The laboratory data at 72 days and 144 days were not evaluated, as they were inadequately reported and did not align with the study design due to poor patient compliance with repeated blood tests and the difficulty in finding blood tests carried out under home care or carried out at another private diagnostic centre.

CONCLUSIONS: The study we carried out made it possible to highlight the statistically significant improvement of the

haemoglobin value in dysphagic patients undergoing treatment with Fe++ EDTA in an oral soluble formulation at a dosage of 1 stick pack per day administered sublingually. Greater compliance both from patients and treating doctors is preferred in order to carry out a serial control of all the parameters required in the study design and therefore a complete evaluation of all the parameters, including the percentage of transferring saturation which cannot be carried out in case of laboratory control of blood count for follow-up.

P30

HOME AS A PLACE OF CARE

Mariano Musci, Francesca Ranghetti, Nicolò Di Lello, Laura Garavaglia, Rachele Canavesi

Fondazione Istituto dei Ciechi di Milano, Italy

AIM: The aim of this study was to conduct a preliminary literature review on the utility of home-based intervention in elderly individuals diagnosed with dementia. In this study, the domains of autonomy, interests, cognitive stimulation, caregiver relationship, and mood were examined, as several studies have focused on investigating these areas in elderly individuals diagnosed with dementia, whether residing in nursing homes or receiving home care.

MATERIALS AND METHODS: Literature review.

RESULTS: One of the factors influencing the quality of life experienced by individuals with dementia is their inability to independently perform daily activities, along with a decrease of the participation in decisions regarding their daily functioning. Literature has highlighted certain activities that serve as protective factors for dementia patients: physical activity, television and newspapers, and crossword puzzles. It has been demonstrated that nurturing interests helps maintain the patient's resources active, enabling them to cope with difficulties even in the advanced stages of the disease (Windle *et al.*, 2023). In recent years, there has been an increasing utilization of non-pharmacological interventions in addressing cognitive decline and dementia. Home-based cognitive stimulation can provide functional support to dementia-affected populations and their families, delay the institutionalization, and keep elderly individuals in a familiar environment. "Multiple studies provide empirical evidence that cognitive stimulation effectively mitigates the decline of cognitive abilities in individuals with dementia. The efficacy of cognitive stimulation is contingent upon the frequency of interventions, with notable benefits observed when sessions occur at a frequency of no less than two per week, sustained over a minimum duration of one year (Tan *et al.*, 2022). Psychological aspects related to the mood of the elderly are fundamental to care. Substantial findings have indicated improvements in mood disorders, enhanced quality of life, and alleviation of neuropsychiatric symptoms, attributable to the implementation of home-based care rooted in the Person-Centered Care paradigm. Person-Centered Care interventions have demonstrated notable efficacy in ameliorating agitation and depressive symptoms among elderly individuals with dementia. Furthermore, addressing informal caregiving, frequently provided by caregivers, has been associated with a favorable modulation of mood and reduction in anxiety levels in both dementia patients and their caregivers. (Barnay *et al.*, 2016). One of the factors affecting an individual's relationships is the presence and extent of stress in the system they live in. Caregivers experience reduced stress levels when the burden of elderly parent care is alleviated. Transitioning to home care mitigates caregiver isolation, consequently enhancing their quality of life (Bowen, 2014). Moreover, elderly individuals under home care demonstrate superior maintenance of social interaction skills and exhibit higher relational quality with their children compared to those residing in institutionalized settings (Nikmat, 2015). Some articles also emphasize the importance of the quality of the caregiving relationship.

CONCLUSIONS: According to the results of this preliminary bibliographic research, the positive impact of home care on the quality of life of the elderly with dementia and their caregivers is recognised. This first research paves the way for future research developments, highlighting the matter of investigating this field with further studies.

PARTIAL BIBLIOGRAPHY

Bowen, K. J., Gonzalez, E. W., Edwards, C. Y., & Lippa, C. F. (2014). Needs assessments of memory disorder patients. American Journal of Alzheimer's Disease & Other Dementias®, 29(8), 667-672.

Barnay, T., & Juin, S. (2016). Does home care for dependent elderly people improve their mental health?.Journal of Health Economics, 45, 149-160.

Nikmat, A. W., Hawthorne, G., & Al-Mashoor, S. H. (2015). The comparison of quality of life among people with mild dementia in nursing home and home care—a preliminary report. Dementia, 14(1), 114-125.

Tan, D. G. H., Boo, B. M. B., Chong, C. S., Tan, M. M. L. L., & Wong, B. S. (2022). Windle, G., Roberts, J., MacLeod, C., Algar-Skaife, K., Sullivan, M. P., Brotherhood, E., ... & Stott, J. (2023). 'I have never bounced back': resilience and living with dementia. Aging & Mental Health, 1-13.

P31

GERIATRIC ASSESSMENT IN IDIOPATHIC NORMAL PRESSURE HYDROCEPHALUS

Liliana Mazza[1], Giulia Giannini[2], Sabina Cevoli[2], Alessandro Pirina[3], Fabiola Maioli[4], Giorgio Palandri[3]

[1]UOC Rete Geriatrica Integrata Ospedale Territorio, Ospedale, Bologna, [2]IRCCS Istituto delle Scienze Neurologiche di Bologna, Clinica Neurologica Metropolitana NEUROMET, Bologna, [3]IRCSS Istituto delle Scienze Neurologiche di Bologna, UOC Neurochirurgia, Bologna, [4]UOC Rete Geriatrica Integrata Ospedale Territorio, Ospedale Maggiore, Azienda USL di Bologna, Italy

INTRODUCTION: Idiopathic Normal Pressure Hydrocephalus (iNPH) is a syndrome described by the symptomatic triad of gait dysfunction, cognitive impairment and urinary incontinence (1). Its prevalence is around 4% in individuals aged 65 years and older, being even more common in patients over 80 years old (2). Although the diagnosis is supported by radiological signs, such as ventricular dilation, Evans index and callosal angle (3), clinical features and their interpretation remains crucial. Treatment consists in shunt surgery, which is reported to be effective in decreasing the impact of symptoms. Moreover, its timeliness is associated with increasing survival (4).

AIMS AND SCOPE: The presence of Geriatricians in multidisciplinary teams dedicated to surgical patients is well established in the current literature (5, 6) in different medical fields. Still, collaborative work between Neurosurgery and Geriatrics is just recently arising (7). iNPH is a syndrome at the crossroads between these two disciplines and can represent an excellent starting point for collaboration among specialists. On one hand, Geriatricians may encounter patients with potential iNPH in their care settings and refer them to Neurosurgeons. On the other hand, geriatric management can be useful in these patients both if they undergo surgery and if a conservative follow-up approach is chosen.

DISCUSSION: Adapting Comprehensive Geriatric Assessment (CGA) to iNPH patients means evaluating the four health domains (social, functional, clinical and cognitive) in order to perform a global evaluation of the person. Various screening scores described in international literature are adaptable and can be easily performed by trained specialists. In this context, the coexistence of multiple comorbidities, which can make diagnosis or management more difficult, can benefit from the presence of a geriatrician. A special focus should be made on frailty and mortality risk, which may be considerably useful in neurosurgical approach.

CONCLUSIONS: INPH is a fairly common condition and an important cause of gait impairment and dementia among older patients that can be effectively treated by shunt surgery. Its impact should be considered in terms of differential diagnosis. In this context, Geriatricians cover an important role in identifying misdiagnosed iNPH and in the evaluation of complex and frail patients which may affect surgical options, timeliness and effectiveness.

REFERENCES
1. Hakim, S., & Adams, R. D. (1965). The special clinical problem of symptomatic hydrocephalus with normal cerebrospinal fluid pressure: observations on cerebrospinal fluid hydrodynamics. Journal of the neurological sciences, 2(4), 307-327.
2. Israelsson, H., Larsson, J., Eklund, A., & Malm, J. (2020). Risk factors, comorbidities, quality of life, and complications after surgery in idiopathic normal pressure hydrocephalus: review of the INPH-CRasH study. Neurosurgical Focus, 49(4), E8.
3. Mantovani, P., Albini-Riccioli, L., Giannini, G., Milletti, D., Sorenson, T. J., Stanzani-Maserati, M., ... & Supino, A. (2020). Anterior callosal angle: a new marker of idiopathic normal pressure hydrocephalus?. World Neurosurgery, 139, e548-e552.
4. Andrén, K., Wikkelsø, C., Hellström, P., Tullberg, M., & Jaraj, D. (2021). Early shunt surgery improves survival in idiopathic normal pressure hydrocephalus. European journal of neurology, 28(4), 1153-1159.
5. Watne, L. O., Torbergsen, A. C., Conroy, S., Engedal, K., Frihagen, F., Hjorthaug, G. A., ... & Wyller, T. B. (2014). The effect of a pre-and postoperative orthogeriatric service on cognitive function in patients with hip fracture: randomized controlled trial (Oslo Orthogeriatric Trial). BMC medicine, 12(1), 1-12.
6. Schoenenberger, A. W., Stortecky, S., Neumann, S., Moser, A., Jüni, P., Carrel, T., ... & Wenaweser, P. (2013). Predictors of functional decline in elderly patients undergoing transcatheter aortic valve implantation (TAVI). European heart journal, 34(9), 684-692.
7. Whitehouse, K. J., Jeyaretna, D. S., Wright, A., & Whitfield, P. C. (2016). Neurosurgical care in the elderly: increasing demands necessitate future healthcare planning. World neurosurgery, 87, 446-454.

P32

LONGER LENGTH OF STAY AND INCIDENT DELIRIUM AMONG OLDER ADULTS IN INTERNAL MEDICINE WARD. A CALL FOR A MORE PRECISE APPROACH

Claudio Pace[1], Giorgio Erroi[1], Carlo Custodero[1], Agostino Di Ciaula[1], Antonio Noto[1], Anna Belfiore[1], Stefania Pugliese[1], Antonio Giuliano[1], Chiara Valentina Luglio[1], Pierluigi Carratu'[1], Vincenzo Solfrizzi[2], Piero Portincasa[1]

[1]Clinica Medica "A. Murri", Dipartimento di Medicina di Precisione e Rigenerativa e Area Ionica, Università degli Studi "Aldo Moro", Bari, [2]Medicina Interna e Geriatria "C. Frugoni"; Dipartimento Interdisciplinare di Medicina, Università degli Studi "Aldo Moro", Bari, Italy

INTRODUCTION: Delirium is a frequent complication in hospitalized older adults, with a significant impact on length of stay (LOS) and in-hospital mortality. Early identification of risk factors and the implementation of preventive and management interventions for this condition are crucial to improve clinical outcomes.

AIMS AND OBJECTIVES: We prospectively investigated the prevalence, incidence, and outcomes of delirium in a ward of internal medicine within a large academic hospital in southern Italy. Moreover among predictors of incident delirium we explored the role of LOS.

MATERIALS AND METHODS: We studied patients ≥65 years transferred from Emergency Department (ED) between January-July 2023 (7 months). Critically ill patients, those with terminal cancer or undergoing chemotherapy, and subjects with a history of alcohol abuse (*i.e.*, ≥2 and 3 drink/daily for females and males, respectively) were excluded. Delirium was assessed using the four 'A's Test (4AT). Multidimensional frailty was measured by a screening tool as the Brief-Multidimensional Prognostic Index (BRIEF-MPI). Multivariate regression models were designed to explore independent predictors of incident delirium.

RESULTS: A total of 93 elderly patients were included (mean age 79±SD 11 yrs; females 34.4%), with a 5-day mean stay at ED. The prevalence of delirium was 18.2% and was associated with higher frequency of dementia, use of physical restraints, urinary catheterization, sedative therapies, and higher levels of multidimensional frailty compared to patients without delirium. Patients with delirium experienced a significantly higher in-hospital mortality (35.3% *vs.* 5.3%, p=0.002). The delirium incidence was 8.9% occurring on average 4 days after admission. Higher 4AT values at admission were independently associated with 3-time higher risk of incident delirium (HR: 3.41, 95% CI: 1.05-11.09,p=0.041). Each single day of hospital stay increased the risk of incident delirium by 13% (HR: 1.13, 95% CI: 1.04-1.22, p=0.005).

CONCLUSIONS: Delirium very frequently occurs in internal medicine wards, and is a clear predisposing condition to higher in-hospital mortality. Longer LOS is not only a consequence of delirium, but also a precipitating factor for delirium. The results of this study call for a more precise approach to non-critical older adults at risk of delirium, *i.e.*, avoiding or shortening the hospitalization, whenever possible.

P33

SARCOPENIA AND TOOTH LOSS. A CASE REPORT IN A FRAIL OLDER PATIENT

Bruno Provenzano

UO Geriatria, Azienda Ospedaliera San Carlo, Potenza, Italy

INTRODUCTION: Frail older patients are susceptible to malnutrition and iatrogenic sarcopenia. This can be linked to the decreased appetite and oral intake, often linked to periodontal disease and tooth loss. Sarcopenia, is a decreased muscle mass or function and is associated with the aging process, as is tooth loss in many older subjects. Tooth loss is caused by several risk factors. Dental caries and periodontal status are linked directly, while other factors, such as health behaviors and general health problems, are indirectly linked to tooth loss. Tooth loss leads to a poor chewing ability which can alter dietary habits and the oral-health-related quality of life. Others factors as age, sex, household income, educational status, smoking, alcohol drinking, and frequency of tooth brushing have also been associated with tooth loss.

AIM: The aim of this case report presentation was to confim the literature data about the prevalence of sarcopenia in patients with periodontal disease and tooth loss.

MATERIALS AND METHODS: The patient in this case was an 89-year-old man residing at home with his family. He had a history of atrial fibrillation, pace-maker implantation for sick sinus syndrome, and had undergone surgery for post-traumatic femoral trochanteric fracture.He was followed for three years. We have been considered the following parameters: baseline health and socioeconomic status, measurements of muscle mass, number of natural teeth, other oral health assessment (periodontitis).The socioeconomic status indicators were household income and educational level. Nutritional status was defined by Mini Nutritional Assessment (MNA). Smoking, alcohol drinking, and exercise status were assessed. For the diagnosis and severity of sarcopenia were used the SARC- F scale (cut-off >4); grip strenght (cut-off <27 Kg for male), chair stand test (cut-off >15 sec for five ripetitions), 4 meters walking test (cut-off: <0.8 m /sec); physical performance battery (cut-off <8); timed up and go test (TUG: cut off >20 sec). Dual energy X-ray absorptiometry was used to measure muscle mass. Appendicular skeletal muscle mass (ASM) was calculated as the sum of arm and leg muscle mass. Muscle mass index was defined as the ASM divided by height squared (ASM [kg]/height [m]2). A muscle index of 7.0 kg/m2 (males) was the cutoff level used to define sarcopenia according to the European consensus on the definition and diagnosis of sarcopenia.The number of natural teeth was investigated

at the beginning and at the end of the observation.Periodontitis, considered as the other oral health assessment, was defined using community periodontal index (CPI). CPI 0: healthy teeth; CPI 1: gingival bleeding; CPI 2: calculus; CPI 3: shallow periodontal pocket; and CPI 4: deep periodontal pocket. Periodontitis was defined as a CPI of 3 or CPI 4.

RESULTS: At the beginning of the observation the patient was 86 old years; the number of natural teeth was 18; the MNA score was 20 and the SARC F scale score was <4. After three years the progressive natural teeth loss (<5) caused by periodontitis, the impossibility to place dental prosthesis, the decreased appetite and food income have modified the results of precedents findings until a clinical conditions of severe sarcopenia.

CONCLUSIONS: Loss of the natural teeth was significantly associated with sarcopenia. The case report confirms the literature data.

P34

UNVEILING THE STEALTHY THREAT OF AUTOIMMUNITY IN THE ELDERLY

Marika Rizza[1], Mariapia Calligari[1], Giuseppe Ciaccio[1], Vittoria Giordano[1], Ester Topa[1], Vincenzo Nuzzo[2], Domenico Birra[2], Dario Leosco[1]

[1]Università degli Studi Federico II di Napoli, [2]Dipartimento di Medicina Generale dell'Ospedale del Mare, Napoli, Italy

INTRODUCTION: The immune system undergoes continuous morphological and functional age-related changes, showing its peak function in puberty and a gradually decrease and remodelling with advancing age, known as immunosenescence. Possible consequences are an increase of autoimmune phenomena, neoplasia incidence and predisposition to infections. The study of autoimmune manifestations in the elderly population should be considered as a priority for future medical research because of the increase in life expectancy, especially in developed countries.

CLINICAL CASE DESCRIPTION: An 81-year-old woman with a history of hypertension, chronic kidney disease, and hypothyroidism presented to the Emergency Department of the Ospedale del Mare accompanied by family members for dyspnea at rest and acute kidney injury. On examination, she was afebrile, had mild systolic hypertension, oxygen saturation 95% on room air, a Glasgow Coma Scale score of 15, a negative neurological examination, and pitting lower extremity edema. Arterial blood gas on admission showed hypocapnia, hypokalemia, and hyponatremia. Laboratory tests revealed neutrophilic leukocytosis, elevated C-reactive protein and creatinine (5 mg/dL). Nephrological consultation was obtained, and blood cultures from a peripheral vein, urine culture, and standard chest X-ray were performed, which showed bilateral pleural effusion. Hypokalemia and hyponatremia were corrected, empirical antibiotic therapy with Piperacillin/Tazobactam and Metronidazole was initiated, and appropriate diuretic therapy was started, as recommended by the nephrologist. Due to the suspicion of congestive heart failure, hospitalization in the internal medicine department was indicated. A high-resolution chest CT scan was performed, which revealed significant right mid-basal and left basal pleural effusion with atelectasis of the adjacent lung parenchyma and some ground-glass opacities in the right lower lobe and a pericardial effusion. The patient then underwent a resting echocardiogram, which did not show reduced ejection fraction or signs of increased filling pressures, consistent with congestive heart failure. Due to persistent dyspnea and pleuropericardial effusion on chest imaging, diuretic therapy was continued. Additionally, due to the development of anemia requiring transfusion, esophagogastroduodenoscopy was performed, which revealed an erosive lesion of the gastric squamocolumnar junction. Because of persistent renal impairment, abdominal ultrasound and CT scan were performed, but did not show any renal pathology with a preserved corticomedullary ratio, contradicting the history of acute over chronic kidney injury. Autoimmune workup was initiated, and in the presence of ANCA positivity with consumption of complement factors C3 and C4, corticosteroid therapy with prednisone 50 mg/day was initiated ex juvantibus for suspected ANCA-associated vasculitis. High-dose parenteral corticosteroid therapy was contraindicated due to the documented erosive lesion on esophagogastroduodenoscopy. The patient was transferred to the Nephrology Department, where she continued corticosteroid therapy and showed signs of improvement in inflammatory markers, renal function, dyspnea, and the known pleuropericardial effusion on follow-up radiological studies. Due to the patient's poor compliance, renal biopsy, the gold standard for definitive diagnosis, could not be performed. However, the clinical and laboratory findings, along with the improvement following the initiation of steroid therapy, strongly support the diagnosis of probable ANCA-associated vasculitis.

CONCLUSIONS: The clinical landscape of geriatric medicine is increasingly characterized by the presence of comorbidities, posing significant challenges for accurate diagnosis and effective treatment. Among these complexities, the rising incidence of autoimmune diseases in elderly patients stands out as a particularly concerning trend. While traditionally considered prevalent among younger individuals, autoimmune disorders are now increasingly affecting the geriatric population, presenting geriatricians with a unique set of diagnostic and therapeutic hurdles.

P35

THE ALLENAMENTE PROJECT FOR EARLY STAGE OF DEMENTIA GERIATRIC PATIENTS: WHAT HAPPENED TWO YEARS LATER?

Chiara Schipa[1], Susanna Gaia Cannizzaro[2], Chiara Di Genova[1], Maura Iacomino[1], Umberto Giuseppe Galasso[1], Elena Del Giudice[2]

[1]Policlinico Umberto I, Rome, [2]Azienda Ospedaliera San Giovanni Addolorata, Rome, Italy

INTRODUCTION: Cognitive impairment/dementia is a multifactorial disease, resulting frominteractions between genetic and environmental factors. It has been estimated that a third of all Alzheimer Disease (AD) case can be attributed to modifiable risk factors, including hypertension, obesity, low physical activity, low educational level, depression and unhealthy lifestyle habits, and a synergistic removal of this risk factors would have a significant impact on the disease prevalence. For these reasons, multidomain interventions was made to act simultaneously on some of the modifiable risk factors of the disease. Scientific evidence suggests that these interventions are more effective if they are aimed at people at risk of cognitive decline, in an early stage and before the onset of symptoms and disability.

PURPOSE: Main aim of this project is to investigate the potential benefits of removing some modifiable risk factors for the disease and to develop multimodal intervention strategies to prevent or delay the onset of cognitive decline and disability.

MATERIALS AND METHODS: It is a project of geriatric, non-pharmacologic and multidomain intervention to prevent or delay cognitive impairment and disability, currently in development in the Cognitive Disorders and Dementia Center of the San Giovanni Addolorata Hospital of Rome. Inclusion criteria are: age ≥65 years and prior diagnosis of Subjective Memory Disorder (Clinical Dementia Rating Scale, CDR=0), Mild Cognitive Impairment (CDR=0.5) or Mild Major Neurocognitive Disorder (CDR=1). These diagnoses are made according to the Diagnostic and Statistical Manual of Mental Disorders - 5th edition criteria (DSM-5). Exclusion criteria are:

Short Physical Performance Battery (SPPB) less than 4, symptomatic motor or cardiorespiratory diseases and CDR 2 or higher. The multidomain intervention lasts 3 months and consists of: nutritional intervention, made of nutritional counseling sessions and a diet supplementation and/or dietary intervention care plan, as needed; sessions of group-based physical exercise of aerobic and anerobic training and exercises for improving postural balance; management of metabolic and cardiovascular risk factors with the monitoring of anthropometric and biochemist factors. The project is made by a multidisciplinary team composed of geriatricians, neurologists, nurses, physiotherapists, a neuropsychologist and a specialist in Clinical Nutrition. Each patient was evaluated at the beginning and end of the project according to the following indicators: Mini Mental State Examination (MMSE), Barthel index, Instrumental Activities of Daily Living (IADL), Geriatric Depression Scale (GDS), SPPB, weight and blood chemistry tests.

RESULTS: This project started in April 2022 and is currently in development. The basic clinical characteristics of participants show the presence of several cardiovascular risk factors and an unhealthy lifestyle, creating a window of opportunity for prevention. Thirty patients have participated to this project in 2 years: four patients received a diagnosis of Mild Major Neurocognitive Disorder (three of them treated with memantine or acetylcholinesterase inhibitors); six patients received a diagnosis of MCI; twenty patients received a diagnosis of Subjective Memory Disorder. The mean age of participants was 77 years; the mean education level was 9.6 years; mean MMSE score was 27.6 points. The basic clinical characteristics of participants show the presence of several cardiovascular risk factors and an unhealthy lifestyle (presence of cardiovascular disease in 20% of participants, obesity/overweight in about 30%, serum cholesterol level >200 mg/dl in 60%, altered fasting blood glucose in 30%, high systolic blood pressure ≥140 mmHg - in 30% of cases), creating a window of opportunity for prevention. Each group three months after the intervention was re-evaluated by the team and improvements were found in the average values of the following indicators: MMSE increased by 0.85 points, IADL, Barthel Index, Tinetti scale and SPPB increased by 1 point, GDS and weight remained stable, total cholesterol decreased from 194 to 187 mg/dL, triglycerides decreased from 103.07 to 81.75 mg/dL, glucose decreased from 95 to 87.75 mg/dL. It has been demonstrated also an improvement in the Systolic Blood Pressure. Five people had adverse effects (hospitalization and falls) and eight patients were lost to follow-up.

CONCLUSIONS: The potential benefits of this multimodal approach include a prevention/delay onset of dementia among high-risk individuals, improvement of physical abilities, preservation of independent functioning, improvement of psychological health and quality of life, protection against adverse effects, increase of social connections and more awareness for patient and caregiver. It could help in the planning of mass preventive strategies in population at risk.

P36

AN EXAMPLE OF INTEGRATION BETWEEN TERRITORIAL SERVICES. A COLLABORATION FOR A PATIENT WITH DUAL DIAGNOSIS

Luisiana Pascucci[1], Giuseppina Soloperto[2], Raffaella Maria Scoyni[3] Liliana Biagi[4]

[1]Psicologa-Psicoterapeuta Responsabile Centro Diurno Il Pioppo, Roma, [2]Fisioterapista, Asl Roma 3, Roma, [3]Medico Geriatra, Asl Roma 3, Responsabile Clinico Centro Diurno Il Pioppo, Roma, [4]Medico Responsabile CAD, ASL Roma 3, Municipio Distretto XII, Roma, Italy

We want to expose a shared journey of a user Mrs. L. A. 54 years old, cared for by services from a young age due to mental retardation. At 27 he married. The TRSMEE, which looked after the lady's son, inserted a home assistant (adult companion) into the family unit made up of Mrs. L., her husband and her son; the event gives rise to persecutory ideation in the patient which is treated by the CSM with low-dose antipsychotics. Subsequently, the patient was placed in the Day Center of the CSM of the District for a rehabilitation program in the occupational laboratory which she still attends today. Over the years, persecutory ideas regress and cognitive degenerative deficits arise which compromise understanding, memory and learning. Furthermore, in the last two years, the patient progressively loses the executive functions she had maintained and shows difficulty in remembering the names of the operators and companions she has known for many years and in participating in the centre's workshops. Furthermore, oppositional behaviors are highlighted, with difficulties in controlling impulses including food, aggressive actions in response to prohibitions and behavioral disorders which make interpersonal relationships within the CD and the family very difficult. For this reason, a neuropsychological evaluation and neuroimaging investigations are performed which highlight the beginning of fronto-temporal dementia. The CSM interfaces with the local CDCD of residence and with the relevant day center for degenerative dementia. Currently Mrs. L.A. carried out the visit of a multidisciplinary team to access the Pioppo day centre, located in via P. Falconieri 53, to test strategic interventions for the management of dementia and non-pharmacological treatments that can be effective in the treatment of behavioral disorders and provide continuity assistance to the user and maintain global responsibility. We want to highlight how the possibility of connecting the different services and the possibility of changing settings in patients with dual diagnoses is important for a continuum of therapy and for more correct management.

P37

THE DIAGNOSTIC-THERAPEUTIC-ASSISTENCE PATH (PDTA) FOR DEMENTIA IN THE ASL ROMA 3 AND THE REGIONAL PROJECT "TIMELY DIAGNOSIS OF MAJOR NEUROCOGNITIVE DISORDER"

Raffaella Maria Scoyni[1], Giovanni Mancini[1], Carola Magni[1], Elisabetta Zuchi[2], Andrea Sciarcon[1], Maria Pirro[3], Daniela Sgroi[4]

[1]ASL Roma 3, [2]ASL Roma 3, [3]MMG, ASL Roma 3, [4]Direttore Sanitario, ASL Roma 3, Italy

The growing aging of the population is leading to a progressive increase in cases of dementia throughout the world, which are often diagnosed late and represent a significant care burden for family members and society, with significant socio-health consequences for the near future. According to regional estimates from Italian epidemiological studies, the cases of dementia currently residing in ASL Roma 3 could amount to 10,592, divided into 5,190 cases with mild dementia, 2,860 with moderate dementia and 2,542 with severe dementia. Also to be considered are patients with Minor Neurocognitive Disorder (cognitive deficits that do not yet compromise the patient's functional autonomy), estimated at approximately 8,922 for the ASL Roma 3, who may or may not evolve towards full-blown dementia in the coming years. On 12/20/2023 the Management of the ASL Roma 3 approved a revision of the Diagnostic Therapeutic Assistance Pathway (PDTA) for dementia. PDTA can be defined as a tool for governing the treatment path which represents the entire multidisciplinary and interprofessional management process of a health problem and a specific category of patients, in a specific local context, which aims to improve the appropriateness clinical and organizational in taking charge and managing patients. It provides integrated and coordinated prevention, diagnosis and therapy activities by General Practitioners (GPs), the Center for Cognitive Disorders

and Dementia (CDCD), home and social care services, semi-residential services (Day Centers and Respite Facilities) and residential (RSA) also dedicated (Alzheimer Hospital Units). The PDTA defines the care standards with the aim of verifying the appropriateness and fairness of the care provided, with a view to overcoming the management by individual specialties, towards a model of transversal processes, the implementation of which is evaluated through Indicators of pre-established results. The PDTA for dementia primarily involves GPs, who can detect their patients' cognitive and behavioral changes earlier (Phase 1: diagnostic suspicion) and direct them towards the process for a timely diagnosis of the neurocognitive disorder, initiating the first tests screening (*e.g.* the simple GPCOG cognitive test) and other neuroimaging and laboratory tests to identify any medical conditions that may affect the patient's cognitive status. The GPs then send the patient to one of the CDCD's local clinics, to carry out a more in-depth neuropsychological examination and the specialist visits (neurological or geriatric) necessary for a more precise diagnosis (Phase 2: diagnostic definition), with the consequent therapeutic indications and for the care of the patient suffering from neurocognitive disorder (phase 3: integrated care) in the various phases of the d isease, with the aim of guaranteeing precise references to the patient and his family, providing appropriate interventions for the stage of the disease and for the care needs, monitor the pathology and intervene in an integrated way in the management of existing clinical problemThe CDCD implements these tasks through the drafting of a diagnostic-therapeutic-assistance sheet (SDTA) which contains all the clinical information necessary for the integrated management of the patient and can also act as a disease certification for various social and healthcare purposes, including the social protection of the patient or the appointment of a support administrator. Furthermore, the CDCD, in concert with the GP and the various local healthcare facilities, plans the patient's follow-up (Phase 4: follow-up) throughout the chronic evolution of the pathology, from the moment of diagnosis to the terminal phases, being able to make use where possible of specialist televisits or other teleassistance initiatives. Single Access Center (PUA), Company Territorial Operations Center (COT-A), District Territorial Operations Center (COT-D), Community House (CdC), Home Assistance Center (CAD), Family Health Nurses (IFeC), Health Unit Continuity of Care (UCA), Municipal or Municipal Social Services, Social Secretariat, Day Centres, Assisted Health Residences (RSA) and Social Volunteer Associations. These actors/services intervene above all in cases of confirmed dementia in conditions of fragility, with the presence of complex needs for which the management of the patient by only the actors of phases 1 and 2 and the family/caregiver may not be exhaustive and for the which requires the involvement of the network of local services for access to social and health services. In these cases, the CDCD clinics activate the socio-health integration network by reporting the case to the PUA of residence (pending the establishment of the COT-D), who in turn can activate the District Multidimensional Evaluation Unit (UVMD) to the formulation of an Individual Assistance Plan (PAI) and the provision of socio-health interventions in the setting identified as most appropriate for the case.

P38

NON-INVASIVE VENTILATION SUPPORT DURING HOSPITALIZATION FOR SARS-COV-2 AND THE RISK OF VENOUS THROMBOEMBOLISM IN OLDER PATIENTS

Carmine Siniscalchi, Andrea Ticinesi, Antonio Nouvenne, Angela Guerra, Alberto Parise, Lorenzo Finardi, Nicoletta Cerundolo, Beatrice Prati, Loredana Guida, Tiziana Meschi

Azienda Ospedaliero Universitaria di Parma, Italty

INTRODUCTION: Despite SARS-CoV-2 infection represents a significant risk factor for venous thromboembolism (VTE), data on the impact of the use of non-invasive ventilation support (NIVS) on the risk of VTE during hospitalization are scarce especially in older patients.

MATERIALS AND METHODS: Data of 1471 SARS-CoV-2 patients, hospitalized in a single hub during the first pandemic wave, were collected from clinical records including symptom type and duration, extension of lung abnormalities on chest computed tomography (CT), laboratory parameters and the use of NIVS. VTE occurrence during hospital stay was the main endpoint.

RESULTS: Patients with VTE (1.8%) had an increased prevalence of obesity (26% *vs.* 11%), diabetes (41% *vs.* 21%), higher CHA2DS2VASC score (4, IQR 2-5 *vs.* 3, IQR 1-4, age- and sex-adjusted p=0.021), cough (65% *vs.* 44%) and experienced significantly higher rates of NIVS (44% *vs.* 8%). On a stepwise multivariate logistic regression model, the prevalence of electrocardiogram abnormalities (Odds Ratio (OR) 2.722, 95% confidence interval (CI) 1.039–7.133, p=0.042), cough (OR 3.019, 95% CI 1.265–7.202, p=0.013) CHA2DS2-VASC score >3 (OR 3.404, 95% CI 1.362–8.513, p =0.009) and the use of NIVS (OR 15.530, 95% CI 6.244–38.627, p<0.001) were independently associated with the risk of VTE during hospitalization. NIVS remained an independent risk factor for VTE even after adjustment for the period of admission within the pandemic wave.

CONCLUSIONS: Our study suggests that NIVS is a risk factor for VTE during hospitalization in SARS-CoV-2 in older patients. Future studies should assess the optimal prophylactic strategy against VTE in patients with SARS-CoV-2 infection.

P39

ADHERENCE TO ANTI-FRACTURE THERAPY AFTER SIX MONTHS FROM HOSPITAL DISCHARGE IN PATIENTS WITH HIP FRACTURE

Elena Sperti, Asia Franceschin, Laura Feltri, Jovana Milic, Giulia Lancellotti, Ilenia Manfredini, Marco Bertolotti, Chiara Mussi, Emilio Martini

UOC Geriatria, Azienda Ospedaliero-Universitaria di Modena, Ospedale Civile di Baggiovara, Reparto di Ortogeriatria, Modena, Italy

BACKGROUND: After the first fragility fracture, the risk of recurrent fractures increases exponentially in the following two years, with up to five times higher incidence [1]. Despite the demonstrated effectiveness of anti-osteoporotic treatment in reducing the risk of fractures, non-adherence to therapy remains a significant issue. Many studies have shown that 75% of older people do not receive treatment for osteoporosis following a hip fracture, and less than 50% of individuals are adherent to anti-fracture therapy [2]. This results in a high rate of recurrent fractures with a significant impact on deterioration of quality of life, in-creased healthcare costs and mortality.

OBJECTIVE: The objective of this study was to describe adherence to the anti-fracture therapy at 6-month follow-up after discharge following hospitalization for hip fracture and explore any reasons for its discontinuation.

MATERIALS AND METHODS: This was an observational prospective study including people >65 years with hip fracture admitted to Ortogeriatrics Department of the University Hospital of Baggiovara (Modena, Italy) from 1 May 2023 to 30 September 2023. According to The Diagnostic and Therapeutic Care Pathways (PDTA), patients undergo a surgical intervention within 48 hours and comprehensive geriatric and functional assessment, including Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL), Clinical Frailty Scale (CFS),

Cumulative Illness Rating Scale (CIRS). Adherence to anti-fracture therapy was assessed through a telephone call at 6-month follow-up from the fracture date. Anti-fracture therapy included bisphosphonates, denosumab and teriparatide. Possible reasons for non-adherence were also collected and included: (i) not prescribed at discharge (due to contraindications), (ii) awaiting specialist visit for osteoporosis, (iii) intolerance/side effects, (iv) self-discontinued due to patient refusal, fear of side effects, or disbelief in its importance, (v) self-discontinued without knowing the reason, (vi) discontinued by primary care physician, (vii) discontinued by another specialist. Non-parametric test were used to describe differences between adherent and non-adherent people to anti-fracture treatment.

RESULTS: A total of 134 patients were reached by telephone at 6 months follow-up, of which 15 did not respond and 10 died. Of remaining 109 patients, 63 (58%) were taking anti-fracture treatment, of which 58 (92.1%) were taking bisphosphonates [alendronate 46 (79.2%), clodronate 6 (10.4%); zoledronate 4 (6.3%), risedronate 1 (2.1%), ibandronate 1 (2.1%)], 3 (4.8%) denosumab and 2 (3.2%) teriparatide. At 6-months, 46 (42%) patients were not taking anti-fracture therapy. When patients were divided into two groups according to adherence, none of the explored covariates were associated with higher risk of discontinuation. In detail, age, sex, median number of drugs of prescribed drugs, multimorbidity and frailty burden, cognitive deficit (assessed with SPSMQ) were not associated with non-adherence to anti-fracture treatment (all $p>0.05$).

CONCLUSIONS: Prevalence of non-adherence to anti-fracture treatment is high in older people after hip fracture. Further studies are needed to explore the relationship between scarce adherence and risk factors related to both patient and physician. Careful and dedicated counselling both for patients and other physicians is required to stress out the importance of secondary prevention of fracture, which may lead to higher adherence and lower rates of discontinuation. Intra-hospital administration of zoledronic acid after hip fracture should be encouraged as it guarantees 100% adherence for the first year after the fracture. Health care model for secondary prevention of fracture should be reshaped and include Fracture Liaison Service (FLS), a coordinated, multidisciplinary approach, designed to identify, evaluate, and manage patients who have suffered a fragility fracture and prevent subsequent fractures. FLS may also improve long-term clinical outcomes in older people with previous hip fracture.

P40

CASE REPORT: MANAGEMENT OF WEANING FROM INVASIVE VENTILATION IN RSA

Enzo Castenetto[1], Eleonora Quagliotti[1], Lavinia Toussan[2], Chiara Carla Monti[3]

[1]RSA Anni Azzurri, Volpiano (TO), [2]RSA Anni Azzurri, Parco di Veio, Roma, [3]Direzione Medica RSA Anni Azzurri, Roma, Italy

INTRODUCTION: The illustrated case report is indicative of the weaning from invasive mechanical ventilation carried out in a nursing Home with structural-organizational and management characteristics identified as a High Complexity Core. This unit has priorities in terms of basic and specialist assistance: OSS and nurse working 24 hours a day, physiotherapist, speech therapist, educator, neuropsychologist and doctor. Furthermore, there is the possibility of making use of specialists belonging to the local health authority.

OBJECTIVES: Demonstrate how the management of difficult cases in RSA is possible thanks to hospital-territory collaboration and team work.

MATERIALS AND METHODS: Mrs. C.L. aged 60, she is hosted at the Anni Azzurri Residence in Volpiano, High Complexity Unit, tracheostomised and ventilated 24 hours a day (setting: Pst. Pins 12 cmH2O, Peep 5 cmH2O, O2 3 L/min) via a home ventilator in february 2022. The admission was the result of bilateral pneumonia which required hospitalization in intensive care and subsequent surgical tracheostomy. In medical history: Type 2 diabetes, arterial hypertension, severe COPD, peripheral vascular disease (left lower limb amputation), paroxysmal atrial fibrillation in NOAC, anxious-depressive syndrome, hypokinetic heart disease (EF 35%). Upon admission to our facility she presented with tracheal colonization of pseudomonas aeruginosa and staphylococcus aureus, she is carrier of nasogastric tube for enteral feeding. After approximately six months, the nasogastric tube was removed following the speech therapy evaluation, while maintaining mechanical ventilation. Weaning from the lung ventilator began on 2.11.2022, gradually disconnecting the patient during daylight hours and maintaining continuous monitoring of saturation and heart rate and at least hourly the respiratory rate during weaning. Subsequently, weaning was carried out using the same methods during the night hours until complete weaning was completed on 1.3.2023. On 21.4.2023 appearance of acute respiratory failure with inspiratory distress and hospital diagnosis of critical tracheal stenosis. The patient underwent emergency bronchoscopic dilation during hospital admission and three bronchoscopic checks performed while she was admitted to the RSA. About a month after the last bronchoscopic check-up, which highlighted a residual tracheal stenosis of 30%, tracheal decanulation was performed. She was subsequently subjected to plastic surgery of the tracheostomy ostium, complicated in the immediate postoperative period by subcutaneous emphysema on the face and in the subclavial area. On 21.4.2024 she was discharged home, followed by the General Practitioner.

RESULTS: The clinical case highlights three moments of discussion. The possibility of having adequate beds available for patients who have acute and chronic complications of the cardio-respiratory system, as well as central and peripheral neurological complications, allows for the adaptation of social and healthcare assistance through continuous clinical and instrumental monitoring of basis, especially linked to the need to have no hospitalization time limits. The presence of professional figures, OSS, nurses, physiotherapists, speech therapists, neuropsychologists, medical specialists, allows team work. The real secret of the patient's success was the work of the care team, involving the care giver and also implementing all the socialization therapies (Pet therapy used in particular with the patient). It is therefore possible to remove a tracheostomy tube in an extra-hospital environment, monitoring vital functions, gradually managing weaning and above all maintaining contact with the specialists involved (resuscitators, bronchoscopists, otolaryngologists and pulmonologists).

CONCLUSIONS: Patients with severe cardio-pulmonary and neurological disabilities can be accommodated in the High Complexity Unit centres. The outcome of these patients is a consequence of the team work of the professional figures involved in the rehabilitation project. In patients with a prevalence of cardio-respiratory compromise, there may be favorable outcomes even many months or a few years following the acute event. In particular in the clinical case, despite the complications that occurred during the care process, the favorable outcome can be attributed to the management of respiratory weaning, the monitoring carried out and above all the possibility of taking advantage of the time spent by our guest at our facility.

REFERENCES

1. Boles JM *et al.* Weaning from mechanical ventilation. Eur Respir J 2007; 29:1033-5.
2. Jaber S *et al.* Ventilator-induced diaphragmatic dysfunction - human studies confi rm animal model findings! Jaber *et al.* Crit Care 2011, 15:206.
3. Ceriana P *et al.* Physiological responses during a T-piece weaning trial with a deflated tube. Intensive Care Med 2006; 32: 1399-403.
4. Bargellesi S *et al.* La gestione della cannula tracheostomica nelle persone con grave cerebrolesione acquisita: consenso a un protocollo condiviso. MR 2013; 27:9-16.

5. Amathieu R *et al.* Influence of the cuff pressure on the swallowing reflex in tracheostomized intensive care unit patients. Br J Anaesth 2012; 109:578-83.

P41

PREVALENCE OF DYSPHAGIA IN NURSING HOMES, IMPORTANCE OF THE ROLE OF THE SPEECH THERAPIST IN EARLY IDENTIFICATION

Chiara Carla Monti[1], Lavinia Toussan[2]

[1]Direzione Medica RSA Anni Azzurri, Roma, [2]RSA Anni Azzurri, Parco di Veio (TO), Italy

INTRODUCTION: Dysphagia, from the Greek dys-difficult and phagein-eat, refers to difficulty in the swallowing process of solid and/or liquid foods. Swallowing is anatomically and physiologically divided into three phases: oral (voluntary and occurs in the oral cavity through the lubrication of the bolus by saliva and tongue movements), pharyngeal (involuntary and transfers the bolus from the mouth to the esophagus, where coordinated muscle contraction is essential to protect the larynx and upper airways from aspiration), and esophageal (involuntary, which moves the bolus from the esophagus to the stomach through peristalsis). Regardless of the cause, dysphagia can lead to significant clinical complications such as caloric-protein malnutrition, sarcopenia, dehydration, and aspiration pneumonia. These complications, especially in the elderly population, even more so if institutionalized, negatively affect the patient's status, compromising recovery after acute events or hospitalizations, and prolonging the length of stay. Dysphagia can also cause chronic discomfort for the patient who no longer perceives the pleasantness of food, thus limiting social interaction and leading to a reduction in mood up to depression. In cognitive decline, the condition of dysphagia is worsened by behavioral alterations preparatory to swallowing, such as awareness of the act of eating, visual recognition of food, or the physiological olfactory response. The prevalence of this pathology is 13% in the general population over 65, rising to more than 50% in people hospitalized in nursing homes. This condition appears in 40-70% of people affected by stroke and in 60-80% of patients with neurodegenerative diseases (up to 82% of patients with Parkinson's disease and 84% of patients with Alzheimer's).

OBJECTIVES: To identify the prevalence of dysphagia in nursing homes and whether the presence of professional figures, such as speech therapists, affects early diagnosis.

MATERIALS AND METHODS: The analysis was conducted over a consecutive 31-day period, during which 5012 unique hospitalizations ID in 43 nursing homes equipped with Electronic Medical Records and over 14000 documents reporting dysphagia were analyzed. The analysis considers the perimeter of nursing homes with EMR and returns the number of hospitalizations having at least one document indicating a condition of dysphagia during the studied time interval (August 1, 2023 – August 31, 2023). For each considered hospitalization ID , the condition of dysphagia may be reported in one of the following three documents: Anamnesis, Speech Therapy Record, Nursing Care Record. The dysphagia research analysis focused on information from the "Nursing Care Record" and "Speech Therapy Record," which presuppose information related to the current clinical course of the patient, unlike the "Anamnesis" document. In the context of these documents, the analysis focused on values related to "Dysphagia" and not "Feeding Autonomy" (a guest could be totally dependent on feeding autonomy and yet not be dysphagic). To identify the presence of dysphagia in the obtained sample, the presence of at least one documentary instance attesting to the presence of dysphagia for that Guest (hospitalization ID) was investigated; that is, the presence of a value among the following "Liquids (use of aquagel)," "Liquids (use of thickener)," "Paradoxical," "Solids," "Solids and Liquids (use of aquagel)," "Solids and Liquids (use of thickener)," "Total," in the Dysphagia field of Nursing Care Record or Speech Therapy Record.Hospitalizations shorter than 24 hours and all observations not dating back to the period August 1, 2023 – August 31, 2023, were excluded.

RESULTS: The overall prevalence of dysphagia in the sample was found to be 17.6%, corresponding to 882 cases. The analysis of the distribution by Business Unit (BU) showed a strong heterogeneity of results. Prevalence values ranged from a minimum of 5% to a maximum of 63%. The most frequent types of dysphagia were towards Solids and Liquids (use of thickener) and Total, with prevalences of 5.5% and 4.5% of the sample, respectively. In general, hospitalizations ID that recorded the presence of at least one type of artificial nutrition among parenteral nutrition (PN), percutaneous endoscopic gastrostomy (PEG), and nasogastric tube (NGT) amounted to 160 cases, corresponding to 3.2% of the studied Guests. Focusing on the 722 guests who presented dysphagia in the absence of artificial nutrition, the prevalence was 14.4%. Of these, 517 presented dysphagia towards the solid and/or solid and liquid component of food, representing 10.3% of the studied sample. Lastly, the presence of the professional figure of the Speech Therapist in the studied BUs was considered: this was operational in 8 of the 43 Units studied (18.6%). It was noted that the count of such eight BUs included the first six Structures for higher prevalence of dysphagia in the absence of artificial nutrition.

CONCLUSIONS: The prevalence of dysphagia in our nursing homes is in line with the prevalence detected in the same care setting and in the population over 65. The data that has been collected shows that the presence of a dedicated professional figure such as the speech therapist significantly increases diagnosis and early detection. In the future, it is intended to study whether this early intervention can significantly improve the clinical outcome of some patients, reducing complications and improving performance status.

REFERENCES
https://bestpractice.bmj.com/topics/en-gb/226
Holland G, Jayasekeran V, Pendleton N, *et al.* Prevalence and symptom profiling of oropharyngeal dysphagia in a community dwelling of an elderly population: a self-reporting questionnaire survey. Dis Esophagus 2011;24:476-80.
Sura L, Madhavan A, Carnaby G, *et al.* Dysphagia in the elderly: management and nutritional considerations[6]. Clin Interv Aging 2012;7:287-98.
Jansson-Knodell CL, Codipilly DC, Legget CL. Making dysphagia easier to swallow: a review for the practicing clinician. Mayo Clin Proc 2017;92:965-72.

P42

ULTRASONOGRAPHIC EVALUATION OF THE QUADRICEPS FEMORIS MUSCLE IN THE DIAGNOSIS OF SARCOPENIA, IN PATIENTS ADMITTED TO AN INTERNAL MEDICINE AND GERIATRIC DEPARTMENT

Paola Tribulato[1], Nicoletta Miano[2]

[1]Geriatric Department,Garibaldi-Nesima Hospital, Catania, [2]Department of Clinical and Experimental Medicine, University of Catania, Italy

INTRODUCTION: Sarcopenia has been recently identified has a new pathological entity,acquiring more and more interest characterized by age-related loss of skeletal muscle mass associated with reduced muscle strength loss and/or physical performance. Many studies have shown an association between sarcopenia and adverse clinical events, such as falls, fractures, disability, nursing home placement, and mortality. Thus, sarcopenia is considered a specific prognostic biomarker in different clinical settings, including non-geriatric patients. Indeed, sarcopenia demonstrated a high public health impact,with great economic

and social burden. Consequently, it is of fundamental importance an early detection of sarcopenia in hospitalized patients.

AIMS: In this study, we aimed to assess the ultrasound effectiveness compared to PMI (Psoas Muscle Index) measurement, obtained through abdominal computed tomography (CT) for sarcopenia diagnosis, in patients aged 65 years or older, admitted to Internal Medicine and Geriatric Departments of Garibaldi-Nesima Hospitale, Catania.

MATERIALS AND METHODS: We included subjects aged 65 years or older admitted to Internal Medicine and Geriatrics Departments from February 2023 to July 2023, that underwent an abdominal CT, including scans passing through the L3 lumbar vertebra ordered in the initial evaluation for the underlying pathology for which they were hospitalized. We measured the PMI, on CT scans of the abdomen passing through L3, in order to define the presence of sarcopenia. We calculated for all the CONUT score, which is an innovative simple tool to assess the nutritional status based on three parameters: total cholesterol, lymphocyte count and albumin levels. All patients,underwent ultrasonographic examination of the dominant lower limb halfway between the upper edge of the patella and the anterior superior iliac spine, using an Esaote MyLab Alpha ultrasound system equipped with a linear probe. The following parameters were considered: the thickness (MT) of the quadriceps femoris, including the rectus femoris (RF) and vastus intermedia, this value was reported in mm and the cross-sectional area (CSA) of the rectus femoris, reported in cm2. The measurement method used is the one suggested by the Sarcopenia through Ultrasound (SARCUS) working group, which provided an ultrasound protocol for muscle assessment in 2021. Moreover, we collected clinical and hematological data from medical records and we performed hand grip test and SARC-F questionnaires.

RESULTS: A total of 79 patients were included in the study.The study population was divided into two groups according to the presence of sarcopenia, identified by a PMI value below the lower tertile for males and females, 4.68 cm^2/m^2 and 4.23 cm^2/m^2, respectively. Based on these parameters, 52 control patients and 27 patients with sarcopenia, respectively, were selected. A simple regression analysis was performed to analyze the relationship among PMI, ultrasound thickness of the quadriceps femoris (MT RF+VI), ultrasound cross-sectional area of the rectus femoris (CSA FR) and different clinical variables including age, grip strength, SARC-F questionnaire, biochemical and inflammatory data, comorbidities and clinical outcomes. We found that PMI was strongly correlated with ultrasound thickness of the quadriceps femoris (MT RF+VI) and ultrasound cross-sectional area of the rectus femoris (CSA FR) (R 0.66, $p<0.001$; R 0.72, $p<0.001$, respectively). The ultrasound parameters considered, concerning the thickness in mm of the quadriceps femoris and the cross-sectional area in cm^2 of the rectus femoris were significantly lower in sarcopenic patients (13.9±3.2 *vs* 21.8±7.2 mm, $p<0.0001$ and 2.37±1.2 *vs* 4.39±1.65 cm^2, $p<0.0001$ respectively); Furthermore, a significantly higher value of the CONUT score, a score used to assess nutritional status, was observed in these subjects (6.2±2.6 *vs* 4.8±2.6, $p<0.03$).

CONCLUSIONS: In recent years,ultrasound emerged as a simple, reliable and radiation-free method, performed at the patient's bedside, for sarcopenia evaluation. The results of the present study suggest, in line with current literature and EWGSOP guidelines, a significant potential of ultrasonography for sarcopenia diagnosis. In particular, the ultrasound thickness of the quadriceps femoris and the cross-sectional area of the rectus femoris presented a significant correlation with the PMI, calculated on abdomen-CT. The specificity for the sarcopenia diagnosis was higher for the MT RF+VI, compared with the CSA of the RF (92.6% *vs* 85.2%, respectively), while the CSA of the RF had a higher sensitivity(73.1% *vs* 63.5%). These results indicate that ultrasonography, and in particular, the measurement of ultrasound thickness of the quadriceps femoris, is valid and reliable as a method of confirming cases of sarcopenia, as it has a high specificity. However, other studies are needed for methods' standardization and measurements through comparative studies on larger populations.

P43

ASSOCIATION BETWEEN EPICARDIAL ADIPOSE TISSUE AND SYMPATHO-VAGAL IMBALANCE IN ELDERLY PATIENTS WITH MILD COGNITIVE IMPAIRMENT

Martina Valentino, Maria Perrotti, Mariapia Calligari, Luca Corbia, Carmine Dello Russo, Marta Zuccarino, Stefano Maisto, Roberto Vicidomini, Valentina Parisi, Maddalena Conte, Giuseppe Rengo, Dario Leosco, Grazia Daniela Femminella, Laura Petraglia

Università Federico II, Napoli, Italy

BACKGROUND: Heart rate variability (HRV) is expression of the autonomic nervous system function and is defined as the fluctuation of time intervals measured between consecutive heart beats. In physiological conditions, the normal sympatho-vagal balance guarantees a preserved capacity for self-regulation and adaptability of the organism. However, in pathological conditions, its reduction or malfunction is considered the first sign of cardiac autonomic neuropathy and a predisposing factor to the onset of cardiovascular events.It has been shown that HRV alterations, and in particular dysfunctions of the parasympathetic component, can be found in patients with mild cognitive impairment (MCI) (1). HRV anomalies also correlate with the increase in the thickness of the epicardial adipose tissue (EAT), a cardiac visceral fat deposit, capable of directly influencing the underlying myocardium and the coronary circulation through the secretion of multiple pro-inflammatory and pro-atherosclerotic mediators (2)(3).

AIM: Therefore, the aim of the present study was to evaluate the possible correlation between the thickness of the EAT, measured by echocardiographic method, and the temporal variables of the HRV in elderly patients with MCI.

METHODS: From April 2023 to March 2024, 48 elderly outpatients with Mini Mental State Examination (MMSE) between 18 and 24, were enrolled at Geriatrics Unit of University of Naples "Federico II". All patients underwent a complete echocardiographic study, including assessment of EAT thickness, and 24-hour Holter ECG monitoring. EAT was measured in a parasternal long-axis view, at the level of the Rindfleisch fold, between the free wall of the right ventricle and the anterior surface of the ascending aorta (4).The parameters in the temporal domain of HRV were considered for the Holter analysis, among these the value of pNN50%, the percentage of successive R-R intervals that differ by more than 50 msec, expression of the 24-hour parasympathetic activity (5).

RESULTS: The mean age of the enrolled patients was 75.18 years. The mean thickness of the EAT was 14.02 mm. Left ventricular ejection fraction was preserved in all patients (mean EF 63%±1.42). The mean values of HRV temporal parameters in the study population were as follows: standard deviation of all normal R-R intervals (SDNN) 129.26±42.202; standard deviation of the means of normal R-R intervals in 5' (SDANN) 109.30±38.798; square root of the mean of squares of the differences between normal R-R intervals (rMSSD) 55.3±37.947; the percentage difference between two consecutive normal R-R intervals greater than 50 msec (pNN50%) 20.44±20.029. The analysis showed an inverse correlation between the score obtained on the MMSE and the thickness of the epicardial adipose tissue (Pearson Correlation=0.440, p=0.005) .Non-parametric analysis revealed a linear relationship between EAT thickness and rMSSD (Spearman's rho=0.319, p=0.02).

CONCLUSIONS: The present study showed, for the first time in a population of elderly patients with MCI, the correlation between the echocardiographic thickness of EAT and the alterations of HRV parameters, expressed by rMSSD, analyzed by 24H Holter ECG. A larger sample size will be necessary to confirm these data and verify whether the increase in the thickness of the EAT could represent an additional factor in the determinism of the sympathovagal imbalance in elderly patients with cognitive impairment and demonstrate the potential predictive value of the parasympathetic activation index rMSSD in the development and progression of cognitive decline.

REFERENCES
1. Shaffer F, Ginsberg JP. An Overview of Heart Rate Variability Metrics and Norms. Front Public Health. 2017 Sep 28;5:258.
2. Balcioğlu AS, Çiçek D, Akinci S, Eldem HO, Bal UA, Okyay K, Müderrisoğlu H. Arrhythmogenic evidence for epicardial adipose tissue: heart rate variability and turbulence are influenced by epicardial fat thickness. Pacing Clin Electrophysiol. 2015 Jan;38(1):99-106. 4) Sacks HS, Fain JN. Human epicardial adipose tissue: a review. Am Heart J. 2007 Jun;153(6):907-17.
3. White IA. Cardiac Sympathetic Denervation in the Failing Heart: A Role for Epicardial Adipose Tissue. Circ Res. 2016 Apr 15;118(8): 1189-91.
4. Parisi V, Petraglia L, Formisano R, Caruso A, Grimaldi MG, Bruzzese D, Grieco FV, Conte M, Paolillo S, Scatteia A, Dellegrottaglie S, Iavazzo A, Campana P, Pilato E, Lancellotti P, Russo V, Attena E, Filardi PP, Leosco D. Validation of the echocardiographic assessment of epicardial adipose tissue thickness at the Rindfleisch fold for the prediction of coronary artery disease. Nutr Metab Cardiovasc Dis. 2020 Jan 3;30(1): 99-105.
5. Mietus JE, Peng CK, Henry I, Goldsmith RL, Goldberger AL. The pNNx files: re-examining a widely used heart rate variability measure. Heart. 2002 Oct;88(4):378-80.

P44

INTEGRATED CARE SYSTEMS FOR MILD COGNITIVE IMPAIRMENT BETWEEN THE PUBLIC HEALTH SYSTEM AND THE VOLUNTARY SECTOR: RATIONALE FOR A STUDY IN THE AUTONOMOUS PROVINCE OF TRENTO

Livia Wright[1], Alessandra Lombardi[2], Elisa Vanzetta[3], Marco Calabrese[4], Anna Casanova[5]

[1]Libera Università di Bolzano, Brixen, [2]CDCD, UO Geriatria, Dipartimento Anziani e Longevità, APSS Trento, [3]UO Psicologia, APSS Trento, [4]UO Riabilitazione, APSS Trento, [5]UO Geriatria, Dipartimento Anziani e Longevità, APSS Trento, Italy

INTRODUCTION: It is estimated that there are currently 8.456 people ≥60 years old living with Mild Cognitive Impairment (MCI) in the Autonomous Province of Trento (1). Considering that this condition is associated with a heightened risk of developing dementia, it is paramount to offer early interventions, in a secondary prevention perspective. A growing body of evidence suggests that psychosocial interventions for people with MCI are associated with improved quality of life, wellbeing and might impact symptom progression. As with dementia, interventions for people living with MCI should be person-centred and nested in an integrated care system, to enhance their efficiency and effectiveness (2).

SCOPE: This study will be part of a larger study on post-diagnostic support for MCI. In this work package, the aim is to gather the unique perspective of people with MCI and their carers who co-produced a psychosocial intervention in the Autonomous Province of Trento.

MATERIALS AND METHODS: Two consecutive groups of people with MCI were offered cognitive stimulation therapy within the memory clinic (Centro Disturbi Cognitivi e Demenze, CDCD) in Trento (20 participants in total, age range 74-86). Fifteen participants expressed a desire to continue their meetings, so a venue was found within the integrated care system, together with the local Alzheimer's association and with a recently established community centre. A co-production process led to the definition of a project that the group has been carrying out for the past year: the development of an inclusive guide of the city of Trento. The group meets twice a week with two psychologists and a case manager for people with dementia. Meetings include guided tours of historical landmarks and museums, workshops to develop the guide (content and graphics), seminars on topics of interest to the group and social events. Following the work by Söderlund and colleagues (2024) (3), a combination of semi-structured interviews and observational data will be used. This method is chosen because it is suitable to gain a deep understanding of the participant's unique perspectives, particularly participants living with a cognitive impairment. Data will be analysed using thematic analysis.

RESULTS: Different areas will be explored, including – but not limited to – the following: benefits of participating in the group. Based on the literature, we expect participants to report the following themes: peer-support, meaningful engagement, sharing knowledge and developing new skills, relationships with volunteers, inclusion in the community, changes in social health, wellbeing, others disadvantages of participating in the group-challenges of co-production comparison between cognitive stimulation and the current intervention

CONCLUSIONS: Collaboration between the public health care system and third sector within an integrated care pathway has the potential to benefit patients and their families greatly. The results of this study could inform practice and future initiatives, and contribute to the development of a person-centred, sustainable, and replicable integrated model of support for people living with MCI.

REFERENCES
1. Progetto Fondo per l'Alzheimer e le demenze. Le attività dell'osservatorio demenze dell'istituto superiore di sanità. Anni 2021-2023. Report regionale Provincia Autonoma di Trento.
2. Linee di indirizzo Nazionali sui Percorsi Diagnostico Terapeutici Assistenziali per le demenze. Tavolo per il monitoraggio del recepimento ed implementazione del Piano Nazionale Demenze. 2017.
3. Söderlund, M., Hellström, I., Vamstad, J., & Hedman, R. (2024). Peer support for the newly diagnosed: How people with dementia can co-produce meeting centre services. Ageing and Society, 44(1), 180–199. https://doi.org/10.1017/S0144686X22000162.

PAGEPress - Scientific Publications
Via A. Cavagna Sangiuliani, 5 - 27100 Pavia - Italy
Phone +39 0382 1549020
www.pagepress.org