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In the era of "red nose": can the clown-therapy reduce the nursing staff anxiety? Our experience in a Department of Pediatric Surgery

Rossella Angotti, Daniela Meucci, Francesco Molinaro, Bulotta Anna Lavinia, Edoardo Bindi, Elisa Cerchia, Giovanni Vaccarella, Mario Messina

Division of Pediatric Surgery, Department of Medical sciences, surgery and neurosciences, University of Siena, Siena, Italy.

#### **Purpose**

The aim of this study was to evaluate the utility of clowntherapy in reducing anxiety levels of nursing staff during preoperative management of children.

#### **Design and Methods**

This is prospective study, conducted at the Department of

Paediatric Surgery in Siena from July 2011 to January 2012. Sex, age, smoking and the type of surgical procedure were recorded and considered. Nurses were assigned randomly to one of two study groups and classified in a Microsoft Excel database: a clown group (C) and a no-clown (NC) or control group. The Spielberger State Trait Anxiety Inventory form Y measured nurse anxiety.

#### Results

The population consisted of eight nurses (two males and six females), who were assessed a total of eight times each (4 times with clowns and 4 times without them). Anybody was excluded. The nurses in Group C were accompanied by clowns who worked in groups of two or three. Nurses in the control group (NC) worked without clowns. The results indicated that clowns have no effect on our nurses' anxiety.

#### **Practice Implications**

Our results suggest that the best way to reconcile nursing and clowntherapy could be including "smile-therapy" in graduate nursing training.

Keywords: nursing, pediatric, clowntherapy.

The gastro-esophageal reflux in children in videolaparoscopy. Techniques to compare and long-term follow-up

Bindi E., Molinaro F., Meucci D., Cerchia E., Angotti R., Bulotta A.L., Messina M.

Division of Pediatric Surgery, Department of Medical sciences, surgery and neurosciences, University of Siena, Siena, Italy.

#### Introduction

The gastro-esophageal reflux (GER) is defined as the involuntary ascent of gastric contents into the esophagus. It is an event almost physiological, present in the majority of infants and usually lasts a few months. When this situation persists over time, with a clinically significant symptoms or the presence of lesions of the esophageal mucosa, it is called gastro-esophageal reflux disease. In our work we evaluate the role of surgery videolaparoscopy (VLS) in the treatment of gastroesophageal reflux in children with neurological deficits and in those neurologically healthy, as well as analyzing what the operating technique that allows to obtain the best results.

### **Materials and Methods**

In our department we made a retrospective study from January 1998 to February 2013, analyzing 75 cases of children with or without associated neurological disorders who had a gastroesophageal reflux disease. The patients were divided into a group A, consisting of subjects with a neurological disease of base, and in a group B of subjects neurologically healthy. Of each group were analyzed: pre-operative symptoms, mode of feeding, diagnostic tests performed, surgical treatment, packaging of gastrostomy and post-operative complications. The data were analyzed using the Student's t-test for unpaired data.

#### Results

Of 75 patients , 53 ( 70.6 %) were in group A and 22 (29.4%) in group B. In group A there were 35 males (66.1%) and 18 (33.9%) females , the males were in the B 15 (68.1%) and 7 females (31.9%). The average age in group A was 8.7 years in group B 10.5 years. The follow-up of patients in group A was 49.4 months , that of patients in group B 27.9 months. In group A, 43 patients were subjected to intervention of Nissen fundoplication , 4 to Thal fundoplication, 6 to Toupet fundoplication. In Group B, 17 patients were subjected to Nissen fundoplication, 1 to Thal fundoplication, 4 to Toupet fundoplication. In group A, the mean operating timing for the Nissen fundoplication was 300 minutes , that for the Toupet of 264 minutes, the one for the Thal of 240 minutes. The timing mean operative in the group B was of 258 minutes for the Nissen fundoplication, of 198 minutes for the Toupet , of 162

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minutes for the Thal fundoplication. During follow-up 14 patients have reported complications , of which 11 (14.6%) in group A and 3 (4%) in group B. In group A, there was 20.7% of complications in group B 13.6%. For subjects in group A the average length of stay was 7.1 days, for those in group B of 5.8 days.

#### **Conclusions**

Surgical treatment in videolaparoscopy is to be preferred in

the treatment of gastroesophageal reflux disease in children. The minimally invasive approach ensures a reduction of post-operative pain, with shorter hospitalization times and a better aesthetic result. Still remains the subject of discussion what is the best type of fundoplication, since there was a significant difference between the analyzed techniques. In patients neurologically healthy, the best approach is still medical, as the massive surgical approach did not report significant benefits.