Primary carcinoid tumour of the testis: A case-report

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CASE REPORT

A 17-year-old male presented to the outpatient clinic for evaluation of a painful right-sided testicular swelling of 15 days duration. A history of testicular trauma was reported. On physical examination, an indurated and increased in size right testicle was palpable; an US scan showed a mixed echogenic mass, 2.5 cm in size, with a central homogeneous area surrounded by a hypoechoic edge with calcifications and increased vascularity on color Doppler examination.

Tumour markers (βHCG, α-fetoprotein and LDH) were within normal limits. The patient underwent radical orchiectomy. On gross examination, the testis was completely replaced by a well demarcated, non capsulated mass measuring 2.5 cm in the maximum diameter. On cut surface the neoplasm was homogeneous and gray in colour. Necrotic areas and haemorrhage were not seen even after an extensive sampling.

On histological examination the neoplastic cells were arranged in a nesting and trabecular pattern.

Residual testicular parenchyma was atrophic with no evidence of intratubular germ cell neoplasia. The tumor cells showed pale eosinophilic cytoplasm with round to oval nuclei and inconspicuous nucleoli; mitoses were not seen.

There was no evidence of vascular invasion (Figure 1). The histological features were in accordance with a pure TCT without teratomatous components.

Immunohistochemistry showed positive staining with chromogranin, cytokine AE1/AE3 and synaptophysin supporting the *neuroendocrine* (NE) nature of the lesion (Figure 2). Ki 67 was equal to 2% of the neoplastic cells. A final diagnosis of carcinoid tumour (well differentiated NE carcinoma) localised within the testis was rendered.

A staging CT of chest, abdomen and pelvis did not reveal retroperitoneal lymphadenopathies.

The patient subsequently was referred to a gastroenterologist to rule out the possibility of an extratesticular carcinoid tumour.

The urinary excretion of *5-hydroxyindoleacetic acid* (5-HIAA) was within normal range; GIendoscopy was negative and an octreotide scan did not reveal foci of activity. At 2-year follow-up the patient is asymptomatic and without signs of disease recurrence.

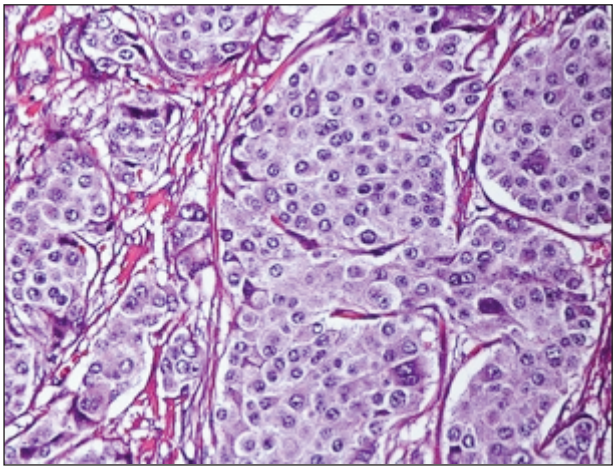

Figure 1.
The neoplastic cells were arranged in a nesting and trabecular pattern. No evidence of intratubular germ cell neoplasia. Tumor cells showed pale eosinophilic cytoplasm with round to oval nuclei and inconspicuous nucleoli; mitoses were not seen. No evidence of vascular invasion. The histological features were in accordance with a pure testicular carcinoid tumour without teratomatous components.

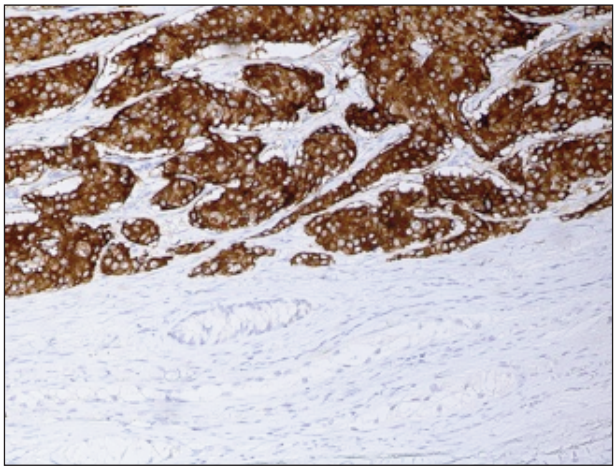

Figure 2.
Immunohistochemistry showed positive staining with chromogranin supporting the neuroendocrine nature of the lesion.

No conflict of interest declared

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