EXTRAGONADAL GERM CELL TUMOUR WITH THE “BURNED OUT” PHENOMENON MIMICKING ARETROPERITIONEAL TUMOUR OF NEUROGENIC ORIGIN


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Summary.- OBJECTIVE: To describe a case of retroperitoneal metastasis of a gonadal germ cell tumour with the “burned-out” phenomenon in a 35 year old patient with a suspected diagnosis of retroperitoneal tumour of neurogenic origin.

METHODS: With the clinical and radiological suspicion of retroperitoneal tumour of neurogenic origin the tumour was removed, via the retroperitoneal space.

CONCLUSIONS: The suspicion of an extragonadal germ cell tumour with the “burned-out” phenomenon modifies the therapeutic attitude, which should begin with orchiectomy, followed by systemic chemotherapy and the surgery kept in reserve for those cases where residual malignant tissue persists.

Keywords: Orchiectomy. Seminoma. Burned-out. Germinal tumour. Neurogenic tumour.

RESULTS: Pathology showed classic seminoma with foci of atypical or anaplastic seminoma, confined to the tissue sample. After a genital examination showing no alterations, a scrotal ultrasound was requested. This revealed a badly delimited hypoechogenic mass with microcalcifications in the left testis and a heterogeneous echostructure in the right testis, with hypoechogenic areas and some microcalcification. Bilateral orchiectomy was performed, with a pathological study compatible with residual scar tissue in the left testicle and local findings of germ cell neoplasia, with no intratubular seminoma in the right testis.

Conclusions: The suspicion of an extragonadal germ cell tumour with the “burned-out” phenomenon modifies the therapeutic attitude, which should begin with orchiectomy, followed by systemic chemotherapy and the surgery kept in reserve for those cases where residual malignant tissue persists.

INTRODUCCIÓN

Primary extragonadal germ cell tumours of the: retroperitoneum, mediastinum or pineal gland are extremely rare. Generally speaking these are metastases of active testicular cancer or testicular cancer with the “burned-out” phenomenon, that is to say, a testicular tumour which regresses or which is burned out leaving a scar in the testicular parenchyma and results in distant metastasis (1-4).

CASE REPORT

We present a case of retroperitoneal metastasis of a gonadal germ cell tumour. Patient, aged 35, with no urological history of interest, urgently admitted to the General Surgery department with a clinical picture of pain in the left iliac fossa irradiating to left flank and accompanied by a palpable tumour in the left iliac fossa. An abdominopelvic CAT scan reveals a solid mass of homogeneous density in the left hemipelvis with no contrast uptake, adjacent to iliac vessels and bladder, which it displaces but does not infiltrate, and the presence of left renal ectasia.

The MRI of the pelvis shows a solid retroperitoneal mass measuring 6.6x6.3x8.5 cm located in the left hemipelvis in close contact with the iliac vein and which displaces the iliac arteries, suggestive of a tumour of neurogenic origin.

During a programmed intervention the patient undergoes surgery via the retroperitoneal space, revealing a smooth surfaced, greyish brown ovoid tumour measuring 6.5x6.3x3.5 cm laterally adhered to the external iliac artery and causing compression of the left ureter, which is removed.

The result of the anatomopathological study showed a classic seminoma with foci of atypical or anaplastic seminoma or with a high mitotic index, extensive areas of necrosis and confined to the tissue sample (Figure 1) There is immediate inter-consultation with the Department of Urology, which rules out any alteration in the genital examination and requests an ultrasound scan of the scrotum, which reveals a badly delimited 3.48 cm hypoechochogenic mass with microcalcifications in the left testis and a heterogeneous echostructure in the right testis, with hypoechochogenic areas and some microcalcification. The alpha-fetoprotein and human chorionic gonadotrophin were normal. Given these findings a bilateral orchiectomy was performed (Figure 2), with a histological study compatible with a nodule of hyaline scar tissue in the left testicle, with no evidence of tumour proliferation and focal findings of germ cell neoplasia with no intratubular seminoma in the right testis.

The patient progresses favourably after adjuvant treatment with systemic chemotherapy.

DISCUSSION

Azzopardi and Hoffbrand, in the 1960s were the first to suggest that a testicular tumour could regress or burn out, leaving a scar in the testicular parenchyma and result in distant metastasis (1-2).

The suspicion of an extragonadal germ cell tumour with the “burned-out” phenomenon modifies the therapeutic attitude, which should begin with the orchiectomy, followed by systemic chemotherapy and the surgery kept in reserve for those cases where residual malignant tissue persists (2) In our case, both the clinical and radiological diagnostic suspicion was
of a retroperitoneal tumour of neurogenic origin, for which reason simultaneous diagnostic and therapeutic surgery was performed.

**CONCLUSION**

Metastatic extragonadal germ cell tumours of the testicle with the “burned-out” phenomenon have a better prognosis than primary retroperitoneal tumours, with less aggressive behaviour and higher survival rates (2, 5-6).

Systematic bilateral orchiectomy is a controversial attitude, but the majority of authors are in agreement about at least ipsilateral orchiectomy when the ultrasound scan of the scrotum reveals some type of anomaly [1]. In our case, both testicles presented ultrasound alterations, despite a normal palpation. After the systemic chemotherapy, the presence of residual neoplastic tissue in the testis would be the cause of tumour recurrence, secondary to a probable haematotesticular barrier, which reduces the effect of the cytostatics. Therefore, with the diagnostic suspicion, the existence of residual neoplastic testicular tissue should also always be ruled out, by means of an active search during the exploration and with imaging tests (7-8).

**REFERENCES AND RECOMMENDED READINGS**

(*) of special interest, ** of outstanding interest)


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