CASE REPORT

Testicular teratoma with malignant transformation, presenting as squamous cell carcinoma with metastatic localization in the penile corpus cavernosum

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Case report

A healthy 45-year-old man was admitted to the urology department because of a painless enlargement of his left testicle. Scrotal ultrasonography revealed a testicular tumour, 3 cm in diameter (Fig. 1). The levels of tumour markers (AFP, ßhCG and LDH) were normal and there were no signs of metastatic disease. Radical orchidectomy disclosed a tumour consisting of teratoma with malignant transformation, presenting as squamous cell carcinoma, growing into the epididymis and testicular vein (Fig. 2). Six weeks after operation the patient noticed a firm induration in the right penile cavernosal body. Doppler ultrasonography revealed a round, solid, intracavernosal tumour, 1.5 cm in diameter. Complete excision disclosed a tumour with histological features resembling the primary tumour. A post-operative abdominal CT scan showed a single, enlarged para-aortic lymph-node, 2 cm in diameter. Standard chemotherapy with bleomycin, vinblastine and carboplatin was commenced and after four cycles the lymph nodes diminished. Additional irradiation of the para-aortic region with a total dose of 50 Gy resulted in complete tumour remission. No sign of relapse was present 15 months after orchidectomy.

Comment

We report a rare case of testicular teratoma with malignant transformation, presenting as squamous cell carcinoma. On the basis of the clinical findings, extragonadal localization of the primary tumour was excluded. Metastasis in the penile cavernosal body, to our knowledge, has not been described in the literature previously. It is probable that this was an extraordinary haematogenous dissemination of the testicular cancer. A single enlarged para-aortic lymph node was considered as a low-volume retroperitoneal metastasis of testicular teratoma, and that was the indication to commence cisplatin-combination therapy [1]. The additional use of radiotherapy after an incomplete response was indicated because both primary and metastatic tumour consisted largely of squamous cell carcinoma, which is radiosensitive. The optimal result was achieved, but because a malignant transformation within teratoma appears to be a poor prognostic factor when found in metastatic sites, the long-term follow-up is awaited [2,3].

References

Fig. 2. Sections of the testes showing squamous cell carcinoma growing into the a, epididymis and b, testicular vein. Haematoxylin and eosin. × 150.

Ulbright TM, Lochrer PJ, Roth IM, Einhorn LH, Williams SD, Clark SA. The development of non-germ cell malignancies within germ cell tumors. Cancer 1984; 54: 1824–33

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