

· *Letters to the Editor* ·

Inguinal recurrence of malignant mesothelioma of the tunica vaginalis: one case report with delayed recurrence and review of the literature

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Dear Sir,

I am Giovanni Liguori, from Department of Urology, University of Trieste, Italy. We write to you to discuss the malignant mesothelioma of the tunica vaginalis. Malignant mesothelioma most often involves the pleural or peritoneal cavity and exposure to asbestos is a well-known risk factor for its development [1]. Most patients seek medical attention after they note a scrotal swelling during the course of several months. On clinical assessment, these tumours are often believed to represent a hydrocele or epididymal cyst. As a result, most patients are initially treated conservatively for a suspected benign entity and the diagnosis of malignancy is often made postoperatively.

In October 2005, a 68-year-old male sought our attention after having developed a nontender subcutaneous left inguinal mass. In June 2000, the patient had undergone, in another institution, trans-scrotal surgical excision of a 1.5-cm painless left epididymal mass that, at histopathological evaluation, resulted in the diagnosis of malignant mesothelioma. The patient underwent no further treatment at that stage and in June 2002 presented to the same department with a left testicular mass of 5 × 7 cm that was managed by left radical orchiectomy and excision of the previous scrotal scar. Histopathological evaluation of the mass showed a diffuse infiltration of the tunica vaginalis and scrotal scar by malignant mesothelioma.

When the patient came to our attention, physical evaluation revealed an inguinal lesion of 3-cm diameter located underneath the orchiectomy scar that was firmly stuck to the skin. Suspecting the recurrence of mesothelioma, we performed a radical excision of the lesion and surrounding scar/connective tissue and of an isle of overlying skin. Histopathological examination showed malignant mesothelioma. At immunohistochemical study calretinin and cytokeratin 5,6 were positive, while carcinoembryonic antigen was negative. No adjuvant radiation therapy or chemotherapy were administered, and the patient commenced a strict follow-up that con-

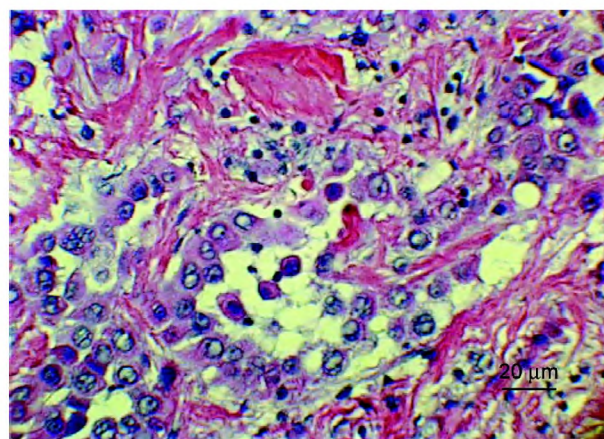


Figure 1. Tumour infiltration characterized by small round nests of small epithelial neoplastic cells. H & E.

sisted of a physical examination every 3 months. An abdominal computerized tomography scan and chest radiograph were obtained every 6 months. All investigations failed to show distant metastases or signs of local recurrence.

On clinical assessment these tumours are often initially thought to represent a hydrocele or an epididymal cyst and the diagnosis of malignancy is achieved only postoperatively. Approximately one third of patients develop recurrence after hydrocelectomy and 12% develop recurrence after scrotal or inguinal orchiectomy. Two thirds of recurrences occur within the first 2 years after initial tumor diagnosis. The median survival is less than 2 years and is closer to 1 year in patients who develop local recurrence [2]. Because radiotherapy and chemotherapy have failed to provide significant remission rates, early aggressive surgical excision appears to be the key modality for treatment. These patients are best treated with radical orchiectomy in all cases and hemiscrotectomy in cases of initial violation of the scrotum [1, 3]. The necessity for inguinal or iliac lymph node dissection, if there is no suspicion of metastases, is not supported because of the low risk of positive lymph nodes [4].

Our case highlights the importance of a correct preoperative diagnosis of the disease since radical orchiectomy is the only treatment that prevents tumor seeding, thus dramatically reducing the risk of local recurrence. Unfortunately, one of the major difficulties is to obtain an accurate preoperative diagnosis. The diagnosis should

be suspected in all patients exposed to asbestos and presenting with clinical symptoms of rapidly growing hydrocele. Therefore, in these patients, cytoanalysis of the hydrocele fluid is recommended [3]. Moreover when hemorrhagic hydrocele fluid, white-to-yellowish excrescences or fibrotic thickening of the tunica vaginalis are found intraoperatively, it is very important to take biopsies of the suspected area.

Even though the mesothelioma in this patient was managed with radical orchiectomy after the initial histopathological diagnosis, the patient is still alive and has not experienced distant metastases. This case demonstrates that late recurrences can occur, thus emphasizing the importance of continuing oncological follow-up for more than 5 years.

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