RECURRENT CONTRALATERAL LEIOMYOSARCOMA OF THE SPERMATIC CORD

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Background: Leiomyosarcomas (LMS) are extremely rare neoplasms totally accounting for 8% of all soft tissue tumors. In contrast to the benign variant of leiomyoma they are considered as malignant. Thet take origin from smooth muscle and differently involve many organs: rarely affect spermatic cord or scrotum. Their clinical behavior is unpredictable and data in literature are controversial: to date surgery represents the best option. We report the case of a recurrent contralateral leiomyosarcoma of the scrotum.

Patient and Methods: A 72-years-old caucasian male presented to us for left scrotum swelling. Five years previously he underwent a radical excision of large right scrotal mass taking origin from spermatic cord which pathology report classified as low grade leiomyosarcoma of the spermatic cord. Six months ago the patient noticed an increase in left scrotum volume initially attributed to inguinal hernia. Due to his past medical history, the patient underwent a CT which revealed a large heterogeneous mass entirely occupying the left inguinal canal and scrotum, taking origin from spermatic cord but not involving left testis: no bone or visceral metastases were described. An excision of the mass was offered with the intent to save the unilateral testis. During surgical procedure the testis and epididymis were successfully separated from the lesion and the mass was removed alone.

Results: On macroscopic examination, the neoplasm was soft, of light yellow appearance and adipose consistency. According to FNLCC grading score, it was classified as a grade G2 showing differentiation score 2 and mitotic count score 1 (2/10 HPF). Resection margins were positive for tumor: no lymph-vascular invasion was described. The immunohistochemistry was positive for smooth actin, totally confirming histological origin of the lesion. It was diagnosed as recurrent leiomyosarcoma of contralateral spermatic cord and the patient was referred to regional center for rare tumors.

Discussion and Conclusions: Sarcoma tumors are rare neoplasms totally accounting for 1% of all human cancers: leiomyosarcoma is a histotype of sarcoma. Etiology still remain unknown[3]. Although uncommon, it is mentioned among scrotal masses of non-testicular origins[2] where represents 5 to 10% of malignant soft tissue tumors[1]. Taking origins from smooth muscle, leiomyosarcoma may potentially occur anywhere. It usually involves different sites and organs as lung, liver, spleen small intestine and stomach: spermatic cord origin has been also described in literature although rare. Its clinical evolution is hardly unpredictable since some of them remain dormant for years while others show an aggressive behaviour. Differentiation, mitotic count, necrosis, lymph-vascular invasion and intralesional calcifications represent the main features to evaluate in order to predict its clinical behavior. Clinical presentation depends on location: CT and MRI represent the best diagnostic tools to identify and describe dimensions, location, organs involvement and, whenever present, metastases. To date, surgery is considered the best treatment since many studies in literature suggest its unresponsiveness to radiation and chemotherapeutic regimens: anyway, whenever not completely removed it can easily recur. Due to the low number of incidence, few informations are available about treatment of recurrent cases and surgery still remains the single option.

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