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CASE REPORT

PARATESTICULAR SOLITARY FIBROUS TUMOR: CASE REPORT

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Abstract

The solitary fibrous tumor is a relatively rare spindle cells neoplasm, longly described in the pleura, but actually touching many tissues and organs. We are reporting a case of a 31 years old man with an isolated scrotal localisation, initially revealed by a slowly developing intrascrotal mass. Most extra-thoracic solitary fibrous tumors are benign, but can relapse or metastasize after a wide resection, therefore an attentive surveillance on the long term is recommended.

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Introduction:-

The solitary fibrous tumor (TFS) is a rare entity, the first descriptions of which, at the level of the pleura, date from 1931 by Klemperer and Rabin. It is characterized by the proliferation of spindle cells. More recently, it has been described in multiple organs, such as the thyroid, lung, upper airways, mediastinum, nasosinus cavities, salivary glands, eye sockets, breast, meninges, kidney and retroperitoneum. , urogenital tract and soft tissue. The location in the urogenital tract remains exceptional. In this topography, we report an observation of TFS with intrascrotal localization, which poses the problem of its diagnosis and its management.

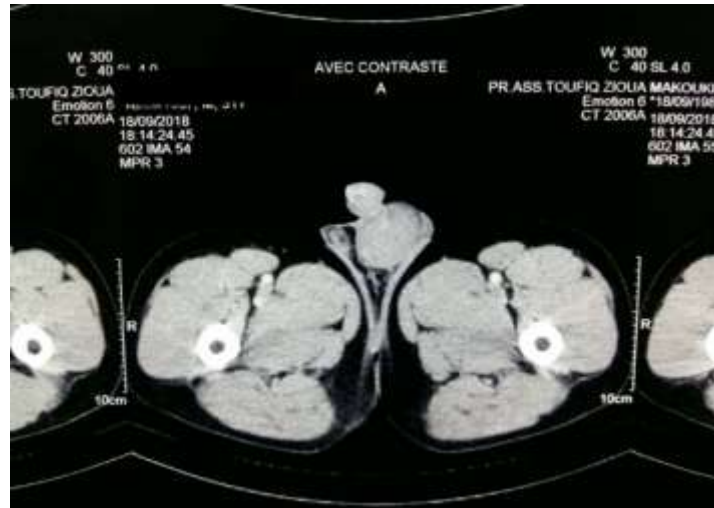
Observation:-

This is a 31-year-old Mr. R.M, with no particular pathological history, who has been consulting for an intrascrotal mass, of progressive onset and slow evolution for 4 years. The clinical examination revealed a left testicle of normal size, with the presence of a well-limited supertesticular mass, hard, mobile, and painless on palpation, measuring approximately 6cm independent of the testis and the spermatic cord. The right testicle is unremarkable. Ultrasound found a heterogeneous mass above the left testis of 6 cm, including the spermatic cord with associated grade 3 varicocele. On Doppler, it is very vascularized and well limited testicular mass.



Picture1:- Ultrasound appearance of the tumor.

Biological tumor markers (BHCG; LDH; AFP) are negative. The abdominopelvic scan is normal except for a left testicular mass.



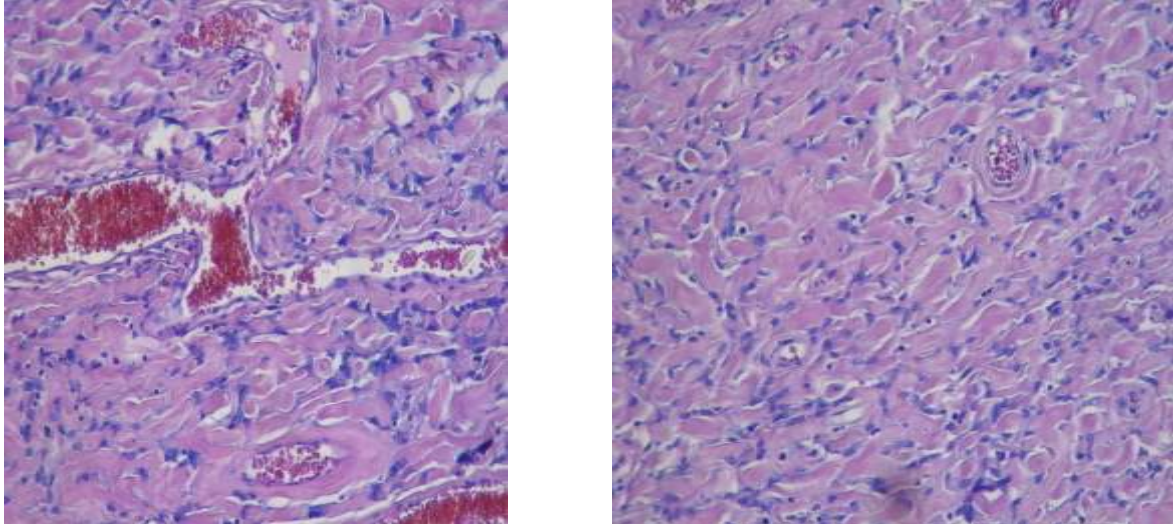
Picture 2:- CT scan of the tumor.

A scrotal surgical exploration was performed showing a well-limited mass of approximately 7 cm, with anarchic, non-pedicated vascularization. The extemporaneous examination is not done. The therapeutic decision was to perform a large tumerectomy.



Picture 3:- macroscopic appearance of the tumor.

Pathological examination showed tumor proliferation organized in long bundles, intersecting in place on a hyalinized and collagenized background. Tumor cells are spindle shaped with focal myofibroblastic differentiation. Immunohistochemical complementation demonstrated strong expression of anti-AML antibodies and anti-Vimentin antibodies with low expression of anti-Ki67 antibody, possibly compatible with paratesticular TFS.



Picture 4:- Microscopic appearance of the tumor.

The post-operative consequences were unremarkable and the outcome at 4 months was favorable.

Discussion:-

TFS is a benign tumor in adults characterized by the proliferation of spindle cells, of mesenchymal origin, which are relatively ubiquitous. Originally reported in the pleura in 1931 by Klemperer and Rabin and long considered to be exclusively pleural, this tumor has gained more interest since its description in other organs and locations [1,2]. Likewise, TFS localized to the male genitalia are rare. Only a few cases have been reported: 3 cases in the seminal vesicles [3, 4], 1 case in the spermatic cord [5], 1 case in the testicular vagina [6] and 3 others in the gonadal area [13]. The age group is between 19 and 85 years old, with an average age of around 50 years [7].

Macroscopically, it typically presents as a single, hard, oval, bumpy, well-defined, encapsulated mass, in principle easily cleavable with the finger, pinkish-gray, sometimes with pseudocystic lacunae.

The anatomopathological characteristics do not contain any specificity linked to localization [8]. Microscopically, their characteristics are based on the combination of three components in varying proportions: a cellular contingent, fibrous tissue and dilated vessels of varying diameter. The cells form short, crisscrossing bundles around branching capillaries, or around thicker fibrohyaline-walled vessels. Tumor cells are spindle-shaped or oval, with scant cytoplasm, with blurred cytoplasmic boundaries, with rounded nuclei or in circumflex accent. In immunohistochemistry, cells are most often positive for CD34 (90 to 100% of tumors) [10], CD99 (70%) and Bcl2 (around 30%) [11]. They are generally negative for cytokeratins, smooth muscle actin, desmin, S-100 protein and c-kit [9]. No anatomopathological criterion currently makes it possible to predict the behavior of TFS, which therefore remains uncertain. Nevertheless, TFS is considered to be benign or low-grade of malignancy, regardless of the location. The forms of poor prognosis are evaluated from 11 to 22% [4,12].

The majority of TFS behave noninvasively and do not recur after complete resection, which appears to be the best prognostic factor [4,12]. Recurrences occur between a few months to 20 years, raising the question of the quality of the initial excision in some cases. Given the histological heterogeneity of this little-known tumor and the small number of long-term studies, the recurrence rate is difficult to assess.

Conclusion:-

The solitary fibrous tumor is far from being a tumor exclusive to the serosa. This is a rare, ubiquitous tumor. The localization at the level of the urogenital tract remains exceptional and its diagnosis difficult. Its prognosis remains unpredictable, despite the absence of formal criteria for malignancy, and depends on the quality of the surgical resection, which remains the therapeutic indication of choice.

Declaration of interests:

The authors declare that they have no conflicts of interest in relation to this article.

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