

FIBROUS PSEUDOTUMOUR OF THE TUNICA VAGINALIS

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SUMMARY

Fibrous pseudotumour of the tunica vaginalis is a benign paratesticular tumour which may mimic testicular tumours. Therefore, it is usually treated by radical orchidectomy. We present a patient whose preoperative diagnosis was made and excision of the tunica vaginalis and nodules was performed. We conclude that macroscopic recognition of this rare tumour coupled with frozen section biopsy can save some of the testicles which could otherwise be excised.

Key words: Fibrous pseudotumour, Tunica vaginalis.

INTRODUCTION

In 1904 Balloch (1) described benign fibrous lesions of the tunica vaginalis and named it as fibromata. Later Hinman and Gibson (2) described multiple varieties and proposed a correlation between chronic proliferative periorchitis and multiple fibromata. In 1946, Goodwin and Vermooten (3) and Goodwin (4) reviewed fibrous and proliferative lesions of the testicular tunic and showed that they were identical histologically. Mostofi and Price (5) named the condition as fibrous pseudotumour of the tunica vaginalis and stated that it is the second common benign lesion of the intrascrotal contents after adenomatoid tumour.

The diagnosis is usually made after radical orchidectomy since it may mimic testicular tumours (6-9). We present a patient with fibrous pseudotumour of the tunica vaginalis. His pre-operative diagnosis was made and excision was performed saving the testis.

CASE REPORT

A 28-year-old white male patient was admitted with a painless nodular swelling in the left scrotum for 6 months. He denied any history of previous surgery, trauma or epididymitis. Physical examination revealed a normal left testis with a nodular mass particularly around the epididymis. A chest X-ray, haemoglobin, WBC counts, urinalysis, blood alpha-fetoprotein and beta-human chorionic gonadotropin levels were

normal. Direct examination of urine for tuberculosis bacilli was also negative. Scrotal ultrasound showed multiple hypoechogenic areas of 0.5-1 cm in diameter especially around the epididymis (Fig. 1).

Surgical exploration was performed and multiple greyish-white nodules of various sizes (0.3-1 cm) were found on the tunica vaginalis forming a mass of 6 cm in diameter (Fig. 2). There was no hydrocele; and a few nodules were present on the epididymis and testis. It was thought to be a benign condition and excision of these lesions together with tunica vaginalis was performed.

Macroscopically, these were firm homogeneous nodules; and histological examination disclosed these nodular structures to be composed of hypocellular, hyalinised fibrous tissue (Figs. 3 and 4). Some of the nodules contained foci of inflammatory cells mainly lymphocytes, histiocytes and plasma cells.

The patient's post-operative course was uneventful and he is free of any recurrence 8 months after surgery.

DISCUSSION

Intrascrotal mass, unless proved otherwise, should be accepted as a testicular tumour. Solid intrascrotal lumps particularly in the young adult should undergo inguinal exploration. Benign lesions of the testicular adnexa, although rare, may mimic testicular tumours and may even require orchidectomy. Therefore, macroscopic appearance at the time of inguinal surgery and frozen section biopsy in doubtful cases can guide the surgeon for final decision.

The most likely factors in the aetiology of fibrous pseudotumour of the tunica vaginalis are trauma, hydrocele, epididymitis, previous surgery or other inflammatory lesions (6). The painless nature of the disease usually renders the patient to notice the lump himself (7,8). The nodules arise from both layers of the tunica vaginalis in majority of the cases, however, 10 % may arise from the epididymis or spermatic cord (8).

Fibrous pseudotumour of the tunica vaginalis with its solid nodular mass may be confused as a testicular tumour and usually treated by radical orchidectomy (6-9). Sen et al. (7) proposed that size of the tumour is the differentiating factor in selection of the extent of surgical resection. We suggest that the slightest suspicion of a testicular tumour should direct the surgeon for a radical orchidectomy; however, the classical macroscopic appearance of the nodules, which may be coupled with frozen section biopsy can render excision of the tunica vaginalis and nodules thus preserving the testis.

Strom (10) published a case of fibrous pseudotumour where partial excision and fulgarization was performed but tumour recurred within a year. This may be caused by incomplete excision or continuation of the aetiological factor. We conclude that macroscopic recognition of fibrous pseudotumour together with tumour markers, other clinical signs and frozen section biopsy can save some of the testicles which could otherwise be excised.

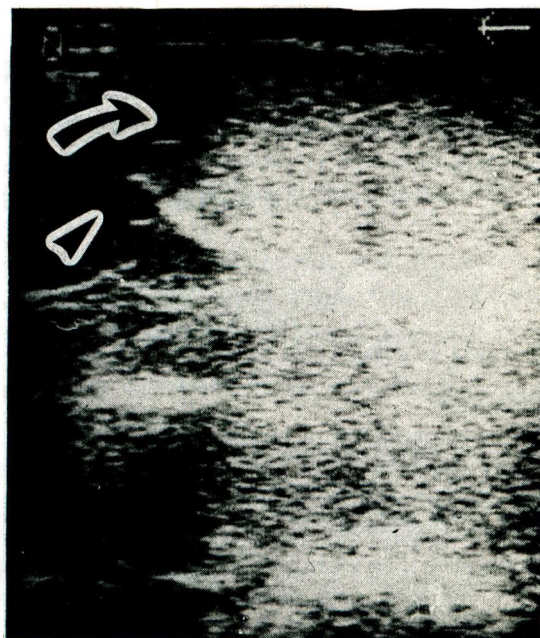


Fig 1. Ultrasound showed multiple hypoechoic areas around the epididymis.

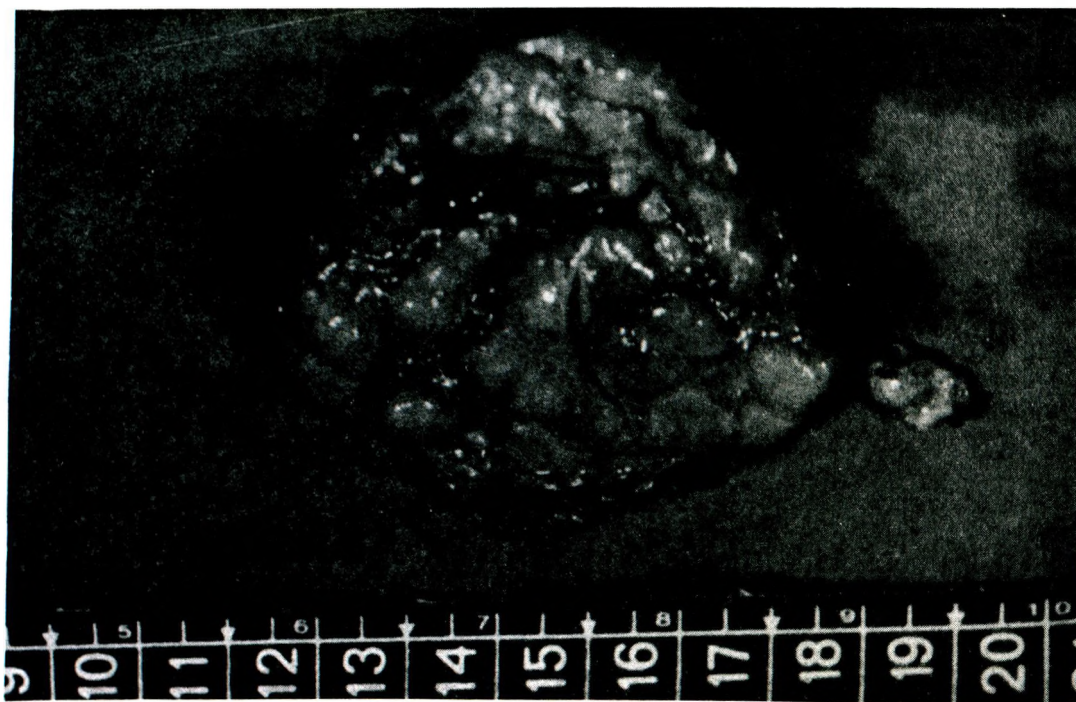


Fig 2. The mass composed of thickened tunica vaginalis and multiple nodules.



Fig 3. Macroscopic appearance of nodules.

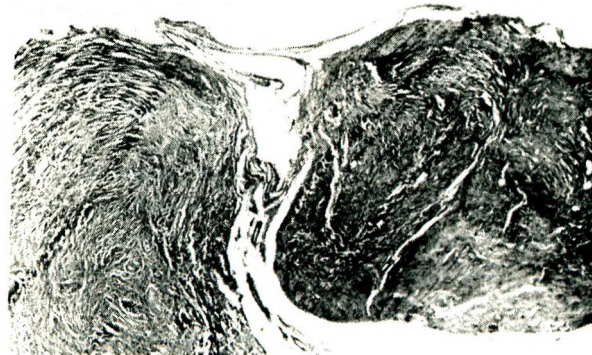


Fig 4. Histological examination showed hypocellular hyalinised fibrous tissue (H-E x 35).

REFERENCES

1. Balloch EA. Fibromata of the tunica vaginalis. *Ann Surg* 1904; 39: 396.
2. Hinman F, Gibson TE. Tumours of the epididymis, spermatic cord and testicular tunics, a review of the literature and report of three new cases. *Arch Surg* 1924; 8: 100.
3. Goodwin WE, Vermooten V. Multiple fibromata of tunica vaginalis testis or a proliferative type of chronic periorchitis: a report of two cases. *J Urol* 1946; 56: 430.
4. Goodwin WE. Multiple benign fibrous tumours of the tunica vaginalis testis. *J Urol* 1946; 56: 438.
5. Mostofi FK, Price EB Jr. Tumours of the male genital system. In: *Atlas of Tumor Pathology*, Washington, Armed Forces Institute of Pathology 1973; 8: 151-154.
6. Sajjad, SM, Azizi MR, Llamas L. Fibrous pseudotumour of the testicular tunic. *Urology* 1982; 19: 86.
7. Sen S, Patterson DE, Sandoval O, et al. Testicular adnexal fibrous pseudotumours. *Urology* 1984; 23: 594.
8. Bruijnes E, Ladde BE, Dabhoiwala NF, et al. Fibrous pseudotumour of the tunica vaginalis testis. *Urol Inter* 1984; 39: 314.
9. Polsky MS, Ball TP, Smith RB, et al. Benign fibrous paratesticular tumours. *Urology* 1976; 8: 174.
10. Strom GW. Pseudotumour of testicular tunic. *J Urol* 1977; 118: 340.