



Strategic Management of Bilateral Testicular Masses: A Case of Isolated Bilateral Testicular Tuberculosis

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BACKGROUND

- Bilateral testicular masses are rarely encountered in our clinical practice and oftentimes pose a formidable challenge to urologists due to the fact that malignancy is always the primary consideration and that needle biopsy is not recommended due to the risk of tumor staging and upstaging in cases of malignancy.

CASE REPORT

- A 41 year old male with no significant comorbidity and previous illness came in to the urology clinic due to palpable painless bilateral scrotal masses.
- Physical examination revealed palpable, non-tender, non-nodular masses on the bilateral scrotal region.
- Laboratory findings showed serum AFB and β -HCG are within normal limits. Pelvic computed tomography (CT-Scan) with contrast revealed a heterogeneously enhancing soft tissue masses with intralesional fluid densities measuring 4.8 x 4.7x 3.9 cm on the right and 3.9x 3.2 x 4.8 cm on the left (Figure 1).
- Patient underwent bilateral partial orchiectomy with frozen section examination which revealed granuloma formation with areas of caseous necrosis on the testis, suggestive of Tuberculosis (Figure 2).
- Histopathology findings of the resected portion of the testis revealed granuloma formation consisting of epithelioid and multinucleated giant cells consistent with Testicular Tuberculosis on both sides.
- Post-operatively, patient was started on Anti-Koch's regimen of Rifampicin, Isoniazid, Pyrazinamide, and Ethambutol for the first 2 months, followed by Rifampicin and Isoniazid for the next 4 months.
- Follow up after treatment was unremarkable with no recurrence of scrotal mass.

DISCUSSION

- Treatment strategies for management of testicular masses rely solely on the urologic principle that all testicular tumors is considered malignant unless proven otherwise in surgery.
- Testis fine needle aspiration biopsy is not routinely done in testicular masses due to the high likelihood of malignancy and its possible spread to the scrotal skin and inguinal lymph nodes.
- Radical orchiectomy remains to be the gold standard for management of testicular tumors, however, with the aid of intraoperative frozen section examination testis sparing surgery can be utilized.
- Isolated tuberculosis of the testis is extremely rare and most cases documented are usually associated with disease in other parts of the genito-urinary tract and other parts of the body.
- Management of bilateral testicular masses with testis sparing surgery allows for maintenance of fertility, avoids the risk of future hypogonadism, and as a result, improves quality of life by preserving sexual function and body image.

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Figure 1. Pre-operative Pelvic CT Scan showing enhancing masses with intralesional fluid densities in both scrotal sacs.

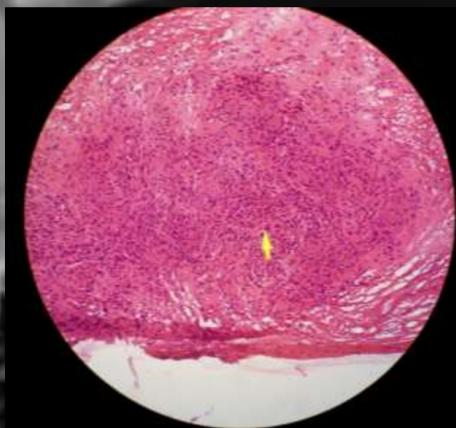


Figure 2. H&E staining showing granuloma formation.



Figure 3. Intraoperative gross appearance of the testicular masses.