

An Uncommon Presentation of Testicular Abscess: A Case Report

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Abstract: Acute epididymo-orchitis is a common cause of acute scrotum in the young sexually active male and in most cases resolves with appropriate conservative treatment. However in 4-5% of males, testicular abscess develops as a complication. We present an uncommon case of a young adult male who came to the surgical emergency with acute scrotum. On investigation there were polymorphonuclear leucocytosis and ultrasonographic features of right epididymo-orchitis with funiculitis with decreased vascularity of right testis with an evolving abscess. Patient underwent scrotal exploration in emergency and was found to have a testicular abscess with sloughing of testicular tissue and scrotal wall of right hemiscrotum. Drainage of pus with wound toileting was done. Post operatively patient showed rapid recovery. A follow up scan at 03 weeks showed improved vascularity of the residual testis and resolution of the testicular abscess, cord oedema and induration.

Keywords: Epididymo-Orchitis, Funiculitis, Testicular Abscess, Pyocele, Orchidectomy.

INTRODUCTION

Acute epididymo-orchitis is inflammation of epididymis associated with orchitis. It affects 0.29 % of young sexually active males [1]. Testicular abscess is an uncommon complication affecting 4-5% of clinically diagnosed males with severe epididymo-orchitis. Several complications including testicular abscess are associated with severe epididymo-orchitis. In order to preserve testicular tissue, an early diagnosis and immediate treatment is very necessary. We here by present a case of a 32 year old male with acute epididymo-orchitis and funiculitis leading to a testicular abscess.

CASE REPORT

A 32 year old married male reported to the surgical emergency with complaints of acute onset pain and swelling of right hemiscrotum for past five days. He had history of fever for last two days which was associated with chills and rigors. There was no history of urinary complaints or any associated medical comorbidities. On examination, patient had pallor and tachycardia. The right hemiscrotum was swollen, indurated, and tender with thickening and tenderness of right spermatic cord. Patient was investigated further by getting haematological investigations, ultrasonography(USG) of scrotum and urine examination. On haematological examination, there was polymorphonuclear leucocytosis with a total leucocyte count of 22000 cells/cu.mm, out of which 95% were neutrophils. USG of the scrotum showed thickening of

the right spermatic cord, inflammation of right epididymis and right testis having altered echotexture with decreased vascularity and mild amount of free fluid with internal echoes in right scrotal sac suggestive of pyocele. Left hemiscrotum and left testis were found to be normal and healthy. Urine microscopy showed a field full of pus cells and epithelial cells. A provisional diagnosis of right epididymo-orchitis with right testicular abscess was made and the patient was taken up for scrotal exploration under spinal anaesthesia. Intra operatively, the entire right hemiscrotum was indurated and erythematous with intratesticular collection consistent with an abscess with inflamed scrotal wall. On incision, around 10 ml pus along with sloughed out and necrotic tissue was drained. The wall of right hemiscrotum was also near totally excised because of the inflammation. A sample for pus culture and sensitivity was sent, wound toileting done and the residual testicular tissue separated from scrotal wall.(Figure.1) The wound was left open after packing with betadine soaked gauze. Postoperatively, patient had a rapid recovery with resolution of pain, swelling, fever and leucocytosis. The pus culture showed E.Coli and Klebsiella sensitive to Doxycycline and the wound healed by a fortnight, which was then secondarily closed.(Figure.2) Follow up USG at three weeks showed improved vascularity of residual testicular tissue with resolution of abscess, cord oedema and induration.



Fig.1: Intraoperative image showing right testis and debrided scrotal wall



Fig. 2: Post-operative image showing secondary closure of scrotal wall with a corrugated drain

DISCUSSION

Testicular abscess is an uncommon complication affecting 4-5% of clinically diagnosed males with severe epididymo-orchitis [2]. Most cases present with severe scrotal pain that may radiate to groin or flank. Fever is also seen in almost all patients that last for an average four to five days. Most cases in men younger than 35 years are due to sexually transmitted organisms (Chlamydia trachomatis, Neisseria gonorrhoea) and those in children and older men are due to urinary pathogens such as E.coli [3]. Testicular abscess can also be due to testicular infarction secondary to torsion or mumps [4] and postinfectious inflammatory reaction to pathogens such as Mycoplasma pneumonia, enterovirus and adenovirus. USG of scrotum is the investigation of choice for diagnosing the condition and shows areas of altered echogenicity and vascularity, enlarged and inflamed epididymis or testis with increased blood flow. A

reactive hydrocoele may be seen with scrotal wall thickening [5, 6].

Management includes oral or systemic antibiotics against specific causative organism with surgical debridement. Occasionally, patients presenting with large abscess involving entire testis and chronic relapsing epididymitis and scrotal pain may require orchidectomy for relief of their symptoms. Serial USG of scrotum should be done to check abscess resolution or progression. Residual testis returns to near normal in most of the cases but secondary scrotal testicular atrophy may occur in untreated cases.

CONCLUSION

Testicular abscess presenting as a complication of acute epididymo-orchitis is uncommon and can be difficult to diagnose. A thorough clinical and radiological assessment is of paramount importance and timely operative intervention must occur in order to provide the best outcome and maximum testicular preservation for these patients.

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