RARE CASE OF EPIDIDYMAL CYST TORSION CAUSING ACUTE SCROTUM IN 4 YEAR-OLD-BOY

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ABSTRACT Torsion of epididymal cyst is a very rare condition presenting with acute scrotum. To our knowledge, this is the first case reported in a 4-year-old. Ultrasound scrotum was performed suggestive of thick-walled cystic lesion along right spermatic cord with internal echoes and septae approximately 3.1 X 1.8 cm. Based on clinical history and examination, surgery revealed torsion testes confirmed by histological examination. The patient was discharged after the operation.

KEYWORDS epididymal cyst, torsion, acute scrotum, testes.

Introduction
An epididymal cyst is a benign lesion in children and ranges from 5% to 20% in literature in contrast to adults, where it is common [1]. It is probably a congenital abnormality related to hormonal disorders during embryonic life [2-6].

Torsion of an epididymal cyst is an extremely rare cause of acute scrotum in children and young boys, and a few cases have been reported in the literature(7 cases/2018) [7]. However, conservative management in children with epididymal cysts has been suggestive in most, leaving cystic surgical season for a minority of patients[8,9]. In this report four- a year-old boy with an epididymal cyst is presented and discussed concerning related literature.

Case Report
The patient was a four-year-old boy referred to the hospital with erythema, swelling and pain in the right hemi scrotum. The left scrotum was normal. There was no history of trauma to the scrotum, and there was tenderness over the right scrotal region for which ultrasound scrotum was performed suggestive of infected encysted hydrocele of the right spermatic cord with mild right hydrocele. The transillumination test was negative.

The patient had no fever or urinary complaints. A blood test showed an increase in TLC and polymorphs. Based on clinical examination patient was transferred to the operating room and underwent right scrotal exploration under general anaesthesia.

On the operation table under anaesthesia first aspiration was done. Haemorrhagic fluid was aspirated. The oblique incision in the groin in the suprapubic region was given. After the opening of the tunica vaginalis, a 3 x 1 x1 cm cystic mass was found connected to the epididymis, which was twisted for 540° was seen. A pedicle of the cyst was seen on the head of the epididymis. The cyst contained black colour fluid. The cyst was untwisted and excised. To our surprise, the right testis was normal (Fig 2).

Histological examination showed a congested and haemorrhagic epididymis cyst. Post operatively patient was put on antibiotics and analgesics. The patient was discharged three days after the surgery. On follow-up, after seven days, stitches were removed.

Discussion
Acute scrotal conditions are common in children. They present scrotal pain, swelling and redness in the affected hemi scrotum. Surgical consultation is a must to rule out testicular damage. The main goal in patients with acute scrotum is to rule out torsion of the testes within six hours from the onset of pain[10]. Epidermal cyst occurs in 94.9% of boys older than 10 years and 71.2% older than 14 years of age[11]. In our case, the patient was four years old and presented with features of acute scrotum.
The guardian provided no medical records or history of previous ultrasound at the time of admission. An epididymal cyst is usually acquired rather than congenital and is related to scrotal trauma, especially in the paediatric age group. Therefore, the treatment is usually conservative.

In many cases, up to 60% regress spontaneously, especially if below 3 cm [8-12]. Surgery is mandatory in case of torsion or a case of an unclear ultra-sonographic appearance. Intraoperative findings of twisted haemorrhagic cystic lesion arising from the epididymal location of the right testes attached to its poll confirm the diagnosis of and torsed epididymal cyst and led us to carry out excision. The twist was 450°, whereas, in literature, it ranges from 362°-720°[1,7,13-14]

Conclusion

An epididymal cyst’s Torsion should be considered a rare cause of acute scrotum. In children in cases of epididymal cyst opted for conservative management, patients and guardians should be advised on the symptoms of acute scrotum and when to seek help immediately. In cases of occurrence, surgical excision of the epididymal cyst’s torsion becomes necessary. In case of doubt, an ultrasound should be done to rule testicular torsion.

References


