Extracorporeal Testicular Ectopia – A rare anomaly

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Abstract

Background: Scrotoschisis is an extremely rare congenital anomaly which is also known as extracorporeal testicular ectopia. Only few cases have been reported in the literature.

Case report: In this anomaly, testis was eviscerated through a defect in the scrotal wall. A newborn male baby born by full term vaginal delivery weighing 2.5kg presented with respiratory distress due to meconium aspiration. After resuscitation, baby developed pneumothorax on right side for which intercostal drainage (ICD) tube was inserted. On clinical examination, it was found that left testis was exposed through a defect of 2x1cm in the anterior aspect of left side of the scrotum. Testis was of normal size and was meconium stained. Right testis was normal. No associated anomalies were found. Antenatal and family history was not significant. Under local anaesthesia, defect wall was widened, thorough wash given to the testis with warm normal saline, testis was fixed into the scrotal cavity and the defect closed in layers after keeping glove drain. Drain was removed after 48 hours and ICD was removed after 5 days. Patient had uneventful recovery. Ultrasound abdomen was done before discharge, which was normal.

Key words: Scrotoschisis; Scrotal sac; evisceration

Introduction

The extracorporeal ectopia of testis which is eviscerated through the wall of scrotum is called as scrotoschisis[1]. It is a rare entity and only 10 cases have been reported in literature till now[2]. The cause of this entity is not clearly understood. We are reporting this case because of its rarity.

Case report

A new born male baby born by the normal vaginal route and full term gestation weighing 2.5 kg presented with respiratory distress due to meconium aspiration. After resuscitation, baby developed pneumothorax on right side for which intercostal drainage tube was inserted. On examination, it was found that left testis was extruding through a defect of 2x1cm in the antero-lateral aspect of left side of the scrotum. Testis was of normal size and was meconium stained (Figure 1). Right testis was normal. On clinical examination, no associated anomalies were found. Routine haematological and ultrasonogram of abdomen and pelvis were normal.

Management: Under local anaesthesia, defect was widened, thorough wash was given to the testis with warm normal saline, testis was fixed into the scrotal cavity and the defect closed in layers after keeping glove drain (Figure 2). Drain was removed after 48 hours. ICD removed after 5 days. Patient had...
uneventful recovery.

Figure 2: Post-closure of the defect

Discussion
Testis, which descends away from normal pathway, is considered as ectopic, while extracorporeal ectopia is a rare congenital anomaly with normal descent of testis, when the testis extrudes the scrotum called as scrotoschisis. The etiology is not known but various theories have been postulated. Gongaware et al\(^3\) suggested that the failure of differentiation of scrotal mesenchyme and leaving behind a defect where gubernaculum was covered only by a thin layer of epithelium. Lack of sufficient supporting structure results in rupture or avascular necrosis, leading to the scrotal defect. Shukla RM et al\(^4\) proposed that aberrant amniotic bands, strands or cords may cause disruption in formation of abdominal wall, hence an early amniotic rupture or adhesion is supposed to be causative factor of scrotoschisis. Finally, the presence of meconium periorchitis has been accepted as the best theory available. The case in the present study also had meconium residue on testis. Kajori F et al\(^5\) suggested the theory of late rupture of scrotal skin secondary to inflammatory reaction by meconium, which has been extruded from intestinal rupture during fetal life. The passage of meconium from intestinal rupture to scrotum is through patent vaginal conduit. In our patient, however, there was no evidence of persistent gubernacular bulb. Most cases of scrotoschisis are unilateral and affect normal males as seen in our case. Closure of the defect in two layers using absorbable sutures (Vicryl 5-0 in our case), transversely or longitudinally can be achieved after freshening the edges of the defect. The immediate prognosis is good, but long-term results are not available.

Conclusion: Scrotoschisis is a very rare genital abnormality, generally affecting normal-term male infants. The defect can be repaired with conventional trans-scrotal orchiopexy, with a good prognosis, except for cases of testicular torsion and irreversible ischemia.

References

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