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Scrotoschisis: An extremely rare scrotal wall anomaly

Ahmed Eshiba, Mostafa Kotb *

Pediatric Surgery, Alexandria Faculty of Medicine, Alexandria, Egypt

A B S T R A C T

Scrotoschisis, also known as extracorporeal testicular ectopia, is an exceedingly rare congenital abnormality that affects the wall of the scrotum. In this condition, the testis exteriorizes through an opening in the anterior scrotal wall. The exact etiology for scrotoschisis is still unknown; however, many theories arose to explain its occurrence. Herein, we report 19th case in the literature in a 2-day-old boy who presented with an eviscerated right testis. We highlighted the possible etiologic hypotheses and management considerations as well.

1. Introduction

Scrotoschisis, also known as extracorporeal testicular ectopia, is an exceedingly rare congenital abnormality that affects the wall of the scrotum. In this condition, the testis exteriorizes through an opening in the anterior scrotal wall.[1] Herein, we report the 19th case in the literature with a highlight on the possible etiologic hypotheses and management considerations.

2. Case presentation

A 2-day full-term boy presented to our emergency department with evisceration of the right testis from his right hemi-scrotum. He was born by normal delivery with uneventful outcomes to a non-consanguineous parents. Examination of the child was unremarkable except for a right anterior scrotal wall defect of 1.5 × 2 cm admitting the right testis. Although it is mildly edematous with a thin exudative inflammatory membrane overlying it, it looks completely normal with its tunical coverings (Fig. 1A). The child was prepared for operation and all the laboratory investigations where within normal reference range. Broad-spectrum antibiotics were initiated on arrival to our unit.

Under general anesthesia, the scrotal defect was explored and debrided. The extra-corporeal testis was examined thoroughly and showed no torsion, meconium residue or calcified masses. Orchiopexy was done using three 4/0 vicryl sutures to fix the testis to the septum and the scrotal skin was closed using the same sutures (Fig. 1B). Follow-up after 6 months revealed adequate testicular volume and vascularity using Doppler ultrasound.

3. Discussion

The exact etiology for scrotoschisis is still unmasked; however, many theories arose to explain its occurrence. One theory described the lack of differentiation of scrotal mesenchyme layer with subsequent avascular necrosis or rupture of overlying epithelium and the formation of a scrotal wall defect. Others attribute traumatic injury during labor, meconium peritonitis or external mechanical compression due to arthrogryposis as possible predisposing factors,[2,3] although all of them were absent in our case.

Once diagnosed, broad spectrum antibiotics should be started immediately. Due to the lack of the normal testicular anatomical attachments, there is a high liability for testicular torsion and therefore, it is crucial to exclude this pathology during clinical examination. Surgical intervention is needed in these cases although simple dressing with later healing by secondary intention was reported in a single report[4] Surgery entails reduction of the testis with its fixation and closure of the defect. Follow-up is needed to confirm the adequacy of testicular tissue as regards volume and vascularity and can be achieved using Doppler scan.[5]

To sum up, scrotoschisis is a rare congenital anomaly that can affect otherwise healthy testes. It is important to intervene early especially should testicular torsion was found clinically to avoid loss of these testes.

Authors' contributions

AE assisted in drafting the initial manuscript, MK performed the critical revision. All authors read and approved the final manuscript.

* Corresponding author. Department of Pediatric Surgery, Alexandria Faculty of Medicine, Alexandria, 21615, Egypt.
E-mail addresses: ahmed.eshiba@alexmed.edu.eg (A. Eshiba), mostafa.rashad@alexmed.edu.eg (M. Kotb).

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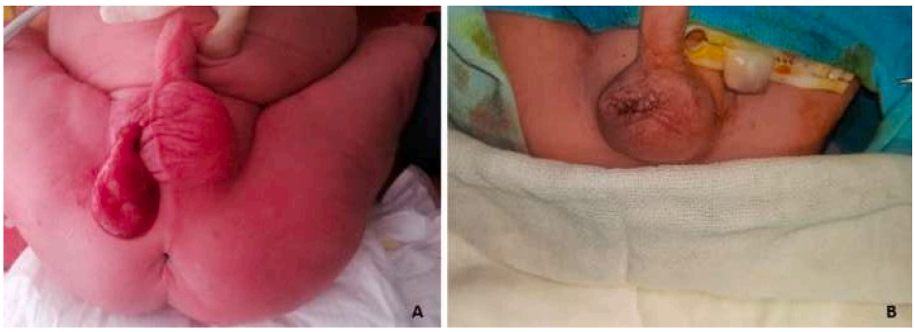

Fig. 1. A. Preoperative photo showing an evisceration of the right testis. B. Orchiopexy and closure of the defect was done.

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Declaration of competing interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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