

Torsion of the Appendix Epididymis- Case Report with Review of the LiteratureSoumyodhriti Ghosh^{1*}, Unmesh Luktuke², Padma Lochan Rath³, Abhishek Kumar⁴, Vivek Sahay⁵¹Consultant Pediatric Surgeon, Abhishek Child Care Hospital Jamshedpur, India²Consultant Pediatrician, Dr Luktuke's Clinic, Jamshedpur, India³Consultant Anesthesiologist, Abhishek Child Care Hospital, Jamshedpur, India⁴Consultant Pediatrician, Abhishek Child Care Hospital, Jamshedpur, India⁵ADMO Surgeon, Divisional Railway Hospital, Ranchi, India**Case Report*****Corresponding author**

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Abstract: Torsion of the testicular appendages are the most common causes of acute scrotum in preteen boys. Due to the closest differential diagnosis of testicular torsion, these conditions warrant urgent diagnosis and management. We present a case of a six years male child with a preoperative diagnosis of testicular torsion which turned out to be torsion of the appendix epididymis on exploration.

Keywords: Testicular torsion; Appendix epididymis; Appendix testis; Orchidopexy.

INTRODUCTION

The appendix epididymis and the appendix testis are amongst the commonest embryological remnants in relation to the testis [1, 2]. The appendix testis is the commoner variant and may be found in 92 percent of individuals. This is located at the upper pole of the testis usually in the groove between the testis and the epididymis. The appendix epididymis is believed to be noted in 23 percent of males and is located at the head or upper pole of the epididymis [1-3]. While the former happens to be a remnant of the Mullerian duct, the latter is derived from the Wolffian duct. Both these remnants are vestigial and remain asymptomatic throughout life [1, 4]. The only attribution that these remnants offer is in the differential diagnosis of an acute scrotum in a preteen male. Torsion of the appendices is known to be one of the commonest causes of acute scrotum⁵. This is important as it needs to be immediately differentiated from its more dreadful counterpart- testicular torsion, which warrants urgent surgical exploration. The diagnosis and differentiation must be made quickly and accurately to prevent the loss of a viable testis.

CASE REPORT

A six years old child was referred by a pediatrician with the complaints of pain in the scrotum. The patient was otherwise well. There was no history of trauma, fever or vomiting. On enquiry, the child specifically located the pain to the left hemiscrotum. On clinical examination, the left testis appeared inflamed, swollen and increased in size compared to right side. There was moderate tenderness to palpation on the left side. The right testis was normally descended and nontender. Rest of the general examination was within normal limits. Based on the clinical findings, a provisional diagnosis of acute epididymo orchitis/testicular torsion was made and the patient was sent for an urgent colour Doppler sonography for exclusion. The Doppler report was suggestive of left sided testicular torsion with congestion of the left testis and preserved vascularity.

The patient was considered for urgent surgical exploration. Transverse scrotal incision was made.

Layers of the scrotal sac were incised until the left testis was visualized. There was mild reactive hydrocele. The testis was taken out of the incision wound and examined. The testis appeared inflamed and congested but there was no apparent twist or evidence of torsion. There was no compromise in vascularity. The upper pole of the epididymis showed the presence of a dark pea shaped region. This was separate from the epididymis and appeared to be necrotic. Based on the position and clinical findings, a presumptive operative diagnosis of torsion of the appendix epididymis was made. The necrotic lesion was carefully excised avoiding injury to the surrounding structures. Since the patient had a sonographic diagnosis of testicular torsion, decision was taken to fix the testes as well? Bilateral orchidopexy was performed. Hemostasis was secured and the incision was closed in layers. The post-operative period was uneventful. The patient was discharged home the next day on a course of antibiotics and analgesics.



Fig-torsion

DISCUSSION

Torsion of the testicular appendages has variations in their management protocols. They are one of the commonest causes of acute scrotum in childhood [1, 5]. The severity of considering the differential diagnosis lies in the fact that they need to be differentiated from torsion of the testis which needs immediate interventions.

Torsion of the appendages present at preteen age with scrotal pain of short duration. Clinically, the child has moderate tenderness on palpation. There are no systemic signs. In certain patients, the inflamed appendage may be visualized over the skin as a bluish structure at the upper end of the testis known as a 'blue dot sign' [4, 6]. Colour Doppler studies may be undertaken to aid in the diagnosis [2, 4-6].

Most of the cases of torsion of the appendix testis or epididymis are treated conservatively and responds well. The drugs used are symptom based and a course of antibiotics with anti-inflammatory analgesics usually suffice [1, 6, 7]. If the diagnosis is certain, surgery is not recommended. However, the dilemma is when this condition fails to get differentiated from torsion testis both clinically and by imaging. In these cases, exploration should always be done even when in doubt [6, 7].

Our patient presented with a similar diagnostic dilemma. The clinical findings with the colour Doppler report of testicular torsion prompted us to perform an emergency exploration. Resection of the necrotic appendix epididymis with bilateral orchidopexy was done. We justify the decision to explore as there was an element of doubt in establishment of the diagnosis.

CONCLUSION

It is imperative that a high index of suspicion should be maintained in dealing with cases of acute scrotum in children. These patients often present late and further time should not be wasted in unnecessary

investigations. In case of any doubt, exploration is the best way to establish the diagnosis. Saving the testis is the primary goal and all efforts should be directed towards it. Bilateral orchidopexy is the standard surgical treatment. In cases where the diagnosis of torsion of testicular appendages can be established with certainty, conservative management may be tried out.

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