TRIORCHIDISM WITH TORSION OF ACCESSORY TESTIS: A CASE REPORT

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Abstract

Polyorchidism is an extremely rare congenital anomaly of the urogenital system and is defined as the presence of more than two testes. The majorities of patients are asymptomatic or present with painless inguinal or scrotal masses. We present the case of an 31-year-old male presented in surgery opd with pain and sudden increase in size of swelling right groin. Although it was present since birth but it was painless and small in size. No history of trauma, fever, pus discharge. On examination single ovoid mobile tender swelling was present in right groin, overlying skin was normal and bilateral testis and penis was normal. USG and CT scan showed triorchidism with torsion of accessory testis. Exploration was done under LA and accessory testis was removed. Polyorchidism is a rare congenital anomaly. Patients with polyorchidism can be managed conservatively unless there are no accompanying problems such as inguinal hernia, cryptorchidism or torsion.

Keywords: Polyorchidism, Accessory testis, Triorchidism.

Introduction

Polyorchidism is a rare condition defined as the presence of more than two histologically proven testes.¹ Triorchidism is the most commonly reported variety, with the supernumerary testis usually presenting on the left.² Its occurrence could be explained by the transverse division of the genital ridge during development and can be classified according to the extent of division (Leung's classification).

Type A includes all supernumerary testes with no associated epididymis or vas deferens owing to complete division of the genital ridge.

Type B includes supernumerary testes that drain into the epididymis of the normal testes.

Type C includes supernumerary testes that possess their own epididymis but share a vas deferens with the regular testes.

In type D polyorchidism, there is complete duplication of the testes, epididymis and vas deferens as a result of a vertical division of the genital ridge and mesonephros.

The management of supernumerary testes is still debatable, particularly when found incidentally in association with undescended testes, testicular torsion, hydrocoele or inguinal hernia.

We report a rare case of triorchidism with torsion of accessory testis in an 31-year-old male.

Case presentation

31-year-old male presented in surgery opd with pain and sudden increase in size of swelling right groin For last 2 days. Although it was present since birth but it was painless and small in size. There was no history of trauma, fever, pus discharge. On examination single ovoid mobile tender swelling Of size 3*3 cm was present in right groin, overlying skin was normal and bilateral testis and penis was normal. Secondary sexual characters were well developed and patient had 2 living children. USG and CT scan showed triorchidism with torsion of accessory testis. Exploration was done under Local Anaesthesia Through Right oblique groin incision. right accessory testis was identified. Cord structures were hypoplastic. Suture ligation of cord structures was done and accessory testis was removed.

Figure 1: Pre-operative

Figure 2: Intra-operative

Figure 3: Post-operative

Discussion

Polyorchidism is a rare condition that may be found incidentally during a groin exploration. There is no consensus in the literature regarding the management of this condition, particularly when the supernumerary testis is viable, thus posing a surgical dilemma when found

incidentally. Authors proposing a conservative approach argue that infertility is a common finding in patients with polyorchidism³ and preserving a potentially functional supernumerary testis to improve the capacity for spermatogenesis is essential even if they are found to be smaller or in ectopic locations.¹ This potential benefit is weighed against a 4% to 7% risk of malignancy in these patients.⁴ With advances in radiological imaging, magnetic resonance imaging has been suggested as a safe and sensitive method for long-term surveillance of patients with polyorchidism.⁵ Although this may not be costeffective, it gives the option of preserving a functioning supernumerary testicle found incidentally if there is doubt about its long-term outcome. Other authors argue that the majority of accessory testes have histologically reduced or absent spermatogenesis and propose that the increased risk of malignancy warrants removal of the supernumerary testis, particularly if it is non-viable, undescended or ectopically located.^{7,8} This is supported by extrapolation from our knowledge of the poor fertility of simple dysplastic and ectopic testes. In our case Patient presented with accessory testis on right side although literature suggest that polyorchidism is more common on left side². Second the age of patient at presentation was 31 years but torsion testis is more common below 25 years of age.

Conclusion

Polyorchidism is a rare congenital anomaly. Patients with polyorchidism can be managed conservatively unless there is no accompanying problems such as inguinal hernia, cryptorchidism or torsion.

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