Transverse Testicular Ectopia: Case presentation and review of literature

Aashirwad Sethi
Narendra Modi Medical College, gujarat, India

Abstract:

Transverse Testicular Ectopia (TTE), also known as Crossed Testicular Ectopia, is an exceedingly rare congenital anomaly of testicular descent, first precisely described by Von Lenhossek in 1886. With an estimated incidence of approximately 1 in 4 million live male births, it is characterized by the unique phenomenon where both testes descend into the same inguinal canal or hemiscrotum, typically contained within a shared common processus vaginalis sac. The mean age of clinical presentation for this condition is around 4 years, and its presence should be strongly suspected in pediatric patients presenting with a unilateral inguinal hernia accompanied by a non-palpable or undescended testis on the contralateral side.

We present a compelling case of a 2-year-old male child who initially presented to our institution in Ahmedabad, Gujarat, India, with a chief complaint of a right-sided inguinoscrotal swelling noted since birth, consistent with a reducible congenital inguinal hernia. Clinical examination also revealed an empty left hemiscrotum with no palpable cord structures, suggesting a left-sided undescended testis. While preoperative ultrasonography was performed, it unfortunately yielded misleading results, reporting a right inguinal hernia with a right undescended testis and erroneously identifying a structure consistent with a testis in the left scrotal sac.

The true diagnosis of TTE was incidentally discovered during surgical exploration via an open right inguinal approach, undertaken for the presumed right inguinal hernia. Upon meticulous dissection and opening of the hernial sac, both testes were unequivocally observed arising from the right deep inguinal ring, each possessing its own distinct vas deferens. Furthermore, a tubular structure, highly suggestive of primitive Mullerian duct remnants, was identified between the two testes and connecting their inferior poles. This structure was carefully divided, and a specimen was sent for histopathological examination, which subsequently confirmed the presence of fibroconnective and fibromuscular tissue with focal lining of low columnar to cuboidal epithelium, consistent with Mullerian remnants. The surgical management involved a herniotomy, followed by right-sided orchidopexy and left-sided transseptal orchidopexy (Ombredanne's technique) to correctly reposition both testes.

This detailed case presentation serves as a crucial reminder of the limitations of sole reliance on imaging modalities, particularly ultrasonography, for definitive diagnosis in complex congenital