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Two testicles in left inguinal region: An unusual presentation of Polyorchidism.

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Abstract:
We present a case of 1-year old boy who presented with left undescended testis and hernia. The testis on right side was normally placed. During surgery 2 testicle each with separate epididymis and vasa deferentia.

Keywords: Undescended double testes, Orchidopexy, Herniotomy.

Introduction:
Polyorchidism is a rare congenital condition defined by the presence of more than one testis in groin region. Th e most common variant is triorchidism, the supernumerary testes being commonly found on left side.[1] Polyorchidism is mostly an incidental finding during surgery for undescended testes, hydrocele, hernia or torsion.[2] The most common anomalies associated with this disorder are testicular mal-descent (40%), inguinal hernia (30%), testicular torsion (13%), hydrocele (9%) and hypospadias (1%).[3] As some of these testicles can be dysgenetic and/or cryptorchid, they may be at increased risk for malignancy, although evidence for this increased risk is mixed.[4]

Case Presentation: A 1-year old boy presented to surgical emergency with painful swelling at left groin came and vomiting for last 6 hours with a history of empty scrotum on le ft side. Physical examination showed a left sided obstructed inguinal hernia, left testicle was impalpable. On examination together with a palpable retractile right testicle although retractile but palpable at its normal anatomical site. Clinical diagnosis of left sided obstructed inguinal hernia with left sided cryptorchidism was made, consent sought from parents and after a brief period of resuscitation patient shifted to operation theatre for emergency operative treatment under general anesthesia.

Operative findings at inguinotomy was a redundant tunica vaginalis which extended for some distance proximally along the cord. During separation of the tunica vaginalis on left side, it was found that the boy had two testicles with separate vasa deferentia and epididymis, having almost equal size and appearance. Isolation of the hernial sac was carefully done in a standard way avoiding injury to the spermatic cords and spermatic vessel. Herniotomy was performed and All structures were placed back in the scrotum in what was thought to be a palpable location, including the testicle.

Investigations: Blood complete picture showed elevated white cell counts with low hemoglobin, platelets count was normal.

Outcome and follow-up: Patient followed as outpatient as per routine protocol for all operated cases. However, parent was advised to have follow up sonograms of testicle annually. The parent was also counseled that infertility or sub fertility may be an issue in marital life of the patient in case vas deferentia has abnormal connection on the affected side.

Discussion: Polyorchidism is a rare congenital anomaly, with the first reported case appearing in the 17th century and the first case with histological evaluation described in 1895.[5]It typically presents as two testicles in one inguinal region with one normal testicle. If the division occurred longitudinally, however, only one of the testicles would receive Wolffian communication.[1]In an effort to characterize polyorchidism further, Leung described the first anatomical classification of this anomaly.[2]

In prior analyses, 11% of biopsied or removed testicles had reduced spermatogenesis and 26% had absent sperm genesis. Additionally, 6.4% of testes were found to contain neoplasms, the majority of which were malignant.[1]In light of these findings, it is understandable why it was common practice to remove the supernumerary testicle.[6]However, with advances in imaging, including MRI and ultrasound, more conservative approaches have been advocated.[7]Case reports of normal follow-up imaging at periods from 2 to 6 years support further conservative management.[8]

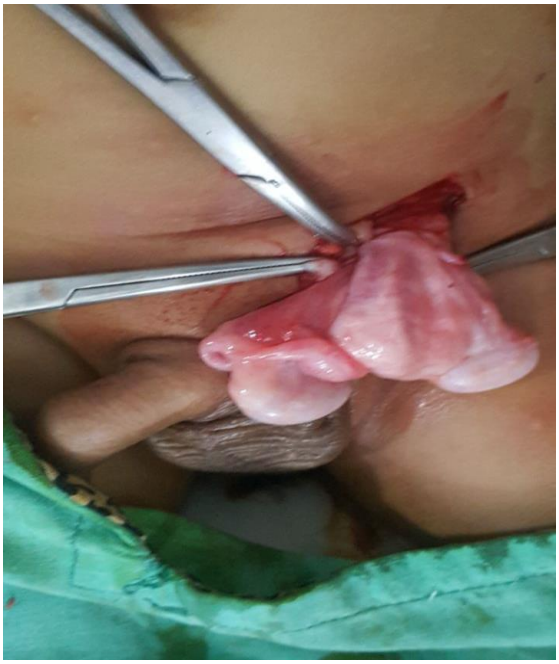

Fig1: Shows double testes in groin.

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