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Pictorial CME

Diaphallus - A Rare Anomaly of the Penis

A male child was brought to surgical OPD for the abnormality of the penis. The child had two penises. During examination the child urinated and the urine came out in two streams from two urethras [Figure 1].The penile duplication is an extremely rare disorder with only approximately 1000 cases of diphallia recorded since the first case reported by Jahannes Jacob Wecker in 1609[1]. This occurs when the baby is born with 2 penises and it is seen in 1 out of 5,000,000 male births.

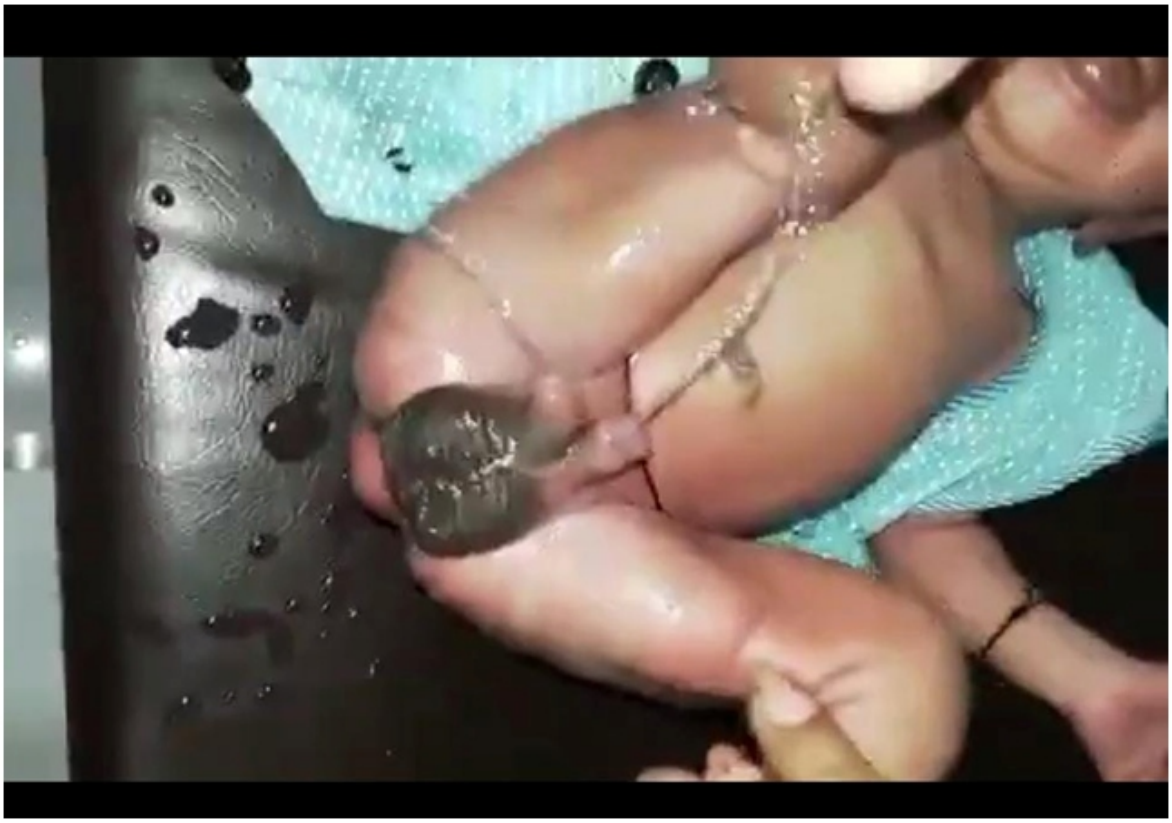

Figure 1: Double penises, two urine streams through two separate urethras

Generally, a child that is born with penile duplication will also have other congenital defects, including spina bifida. Babies born with this condition are at an increased risk of infant death because of the defects and infections that are associated with it. Penile duplication develops around 23–25 days of gestation because the genital tubercle fails to fuse properly[2]. Treatment should always be individualized. The malformations that are potentially life-threatening should be solved first[3]. Intestinal anomalies are frequently associated with complete diphallia and imperforate anus[4].

Embryologically a diphallus deformity arises from either "separation" of the pubic tubercle, wherein each phallus will have only one corporal body and urethra, or "cleavage" of the pubic tubercle wherein each phallus will have two corporal cavernous bodies and urethras[5].

Diphallus has been classified in different ways, such as glandular, bifid, concealed, and complete, hemidiphallus and triple penis[6]. Schneider classified diphallus in three groups: diphallia of glans alone, bifid diphallus, and complete diphallia[6]. Vilanova and Raventos have added a fourth category called pseudodiphllia[7]. The majority have a single corpus cavernosum in each organ[8].

DISCUSSION

Duplication of the penis or diphallus is a rare anomaly. Diphallus may happen in clitoris which is also very rare, as reported by Jeffcoate[9]. Scheneider classified diphallus in three groups: diphallus of glans alone, bifid diphallus, and complete diphallus.

The meatus may be normal, hypospadiac[6], or epispadiac. The scrotum may be normal or bifid. Priyadarshi has reported a case of bifid scrotum[8]. Associated congenital anomalies are present in the majority of cases. Bifid scrotum, hypospadias, duplicated bladder, imperforate anus, bladder exstrophy, colon duplication, inguinal hernia and kidney agenesis have been reported in different studies[10,11,12].

Intestinal anomalies are mostly associated with complete diphallia, and imperforate anus[8,13]. There are multiple embryological explanations for diphallus.

Treatment of diphallus usually includes excision of the duplicated penile structure and its urethra. Associated anomalies can also be repaired surgically[1,13,14].

In short all the patients with penile duplication (diphallus) have to be evaluated carefully because of the high incidence of other systemic anomalies and all can be repaired surgically.

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