www.jmscr.igmpublication.org
Impact Factor 5.244
Index Copernicus Value: 83.27
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: http://dx.doi.org/10.18535/jmscr/v4i8.30

IGM Publication
Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publication

Complete Penoscrotal Transposition- A case Report

Authors
S.Bhagat[1], S.Nisa[2], Braja Behari Panda[3], Bararuchi Dash[4], V.Goguldeep[5], Soumya Ranjan Nayak[6], Keshaba Panigrahy[7], Subhasish Panda[8]
[1]Head and Professor, Department of Radio diagnosis, VIMSAR, Burla, Odisha, India, 768017
[2,3,4]Associate professor, Department of Radio diagnosis, VIMSAR, Burla, Odisha, India
[5, 6,7,8]Post graduate students, Department of Radio diagnosis, VIMSAR, Burla, Odisha, India
Corresponding Author
V. Goguldeep
Email: *goguldr@gmail.com, Contact: 7809927026*

ABSTRACT
Penoscrotal transposition is where malposition of penis occur in relation to scrotum. It is frequently associated with malformation of genitourinary, cardiovascular or skeletal system. We report a rare case of complete penoscrotal transposition with normal scrotum, micropenis, meatal stenosis with obstructive uropathy, b/l dysplastic kidneys with b/l hydroureter.
Keywords: *Penoscrotal transposition, genitourinary anomalies.*

Introduction

Penoscrotal transposition is an extremely rare congenital anomaly of the external genitalia, characterized by malposition of the penis in relation to the scrotum. In incomplete transposition, which is more common, the penis lies in the middle of the scrotum. Both forms are most often associated with a wide variety of other anomalies [1]. Less than 20 cases of CPST with normal scrotum have been reported in the literature[2]. In complete transposition, the scrotum covers the penis which emerges from the perineum. The neonate was a full term booked hospital vaginally delivered male child.it was the third pregnancy for the mother. No h/o teratogenic exposure during pregnancy. Antenatal ultrasound had missed the anomaly but the fetus showed normal growth in utero.at birth the neonate was noted to have complete penoscrotal transposition and was referred to our department for ultrasound of abdomen.

CASE REPORT

Clinical exam

O/E

Facial features were normal. No other anomalies noted.

Perineum

Scrotum was positioned above the penis and penis was noted arising from the perineum. Both the scrotal folds were normal in size and pigmentation and on palpation contained testis. Anal opening was noted normally. The penile tissue was seen covering the anal opening, smaller than normal and the meatal area could not be visualised properly in the penis.

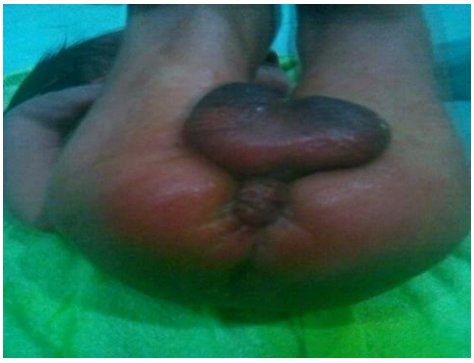

Fig. 1 showing the transposition with

Investigations

Ultrasound Abdomen and Perineum

Solid organs like liver and spleen were normal. There was no bowel anomaly. B/L kidneys were normal in size but showed cysts of varying sizes. Renal pyramids could not be ascertained properly. B/L ureters were dilated (R>L).bladder was found to contain echogenic urine. B/L testes were found inside the scrotal sac and of normal echo texture and size. Ultrasound of the posterior penile tissue showed normal corporal signature. and over the anal dimple showed normal rectum and anal canal.

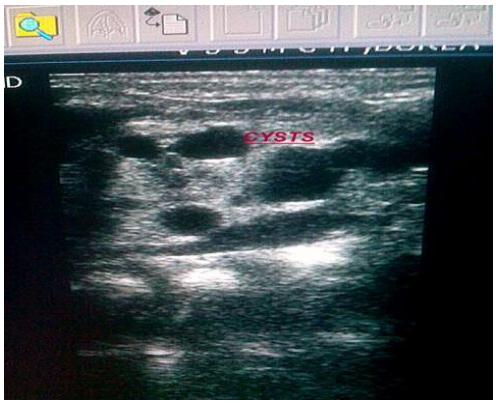

Fig. 2 showing renal cysts

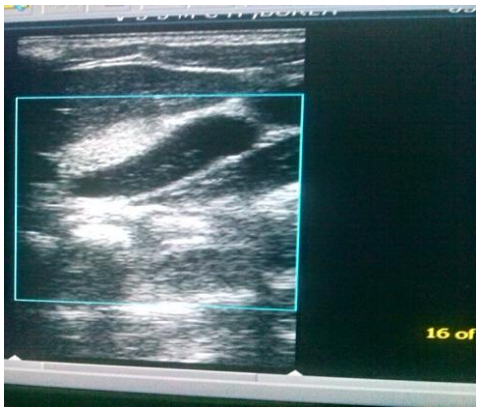

Fig. 3 showing dilated ureter

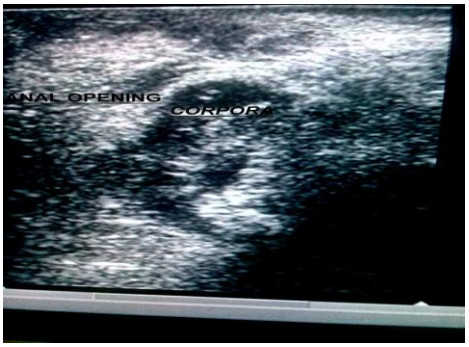

Fig . 4 USG showing penile tissue near anal opening

Angiograffin enema

Angiograffin enema was done to rule out any complex cloacal anomalies.it was found to be normal.

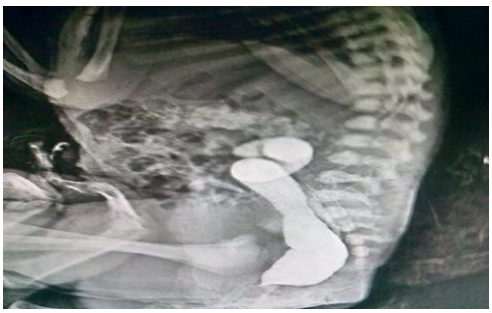

Fig. 5 showing no cloacal anomaly

CT scan with CT Urography

CT KUB was done with child protocol

B/l kidneys showed cortical cysts. There was B/L hydroureteronephrosis. Bladder was found normal. Urethral opening was noted posteriorly in the penile tag. B/L nephrogram was normal. But the kidneys showed poor excretion of contrast s/o poor renal function.

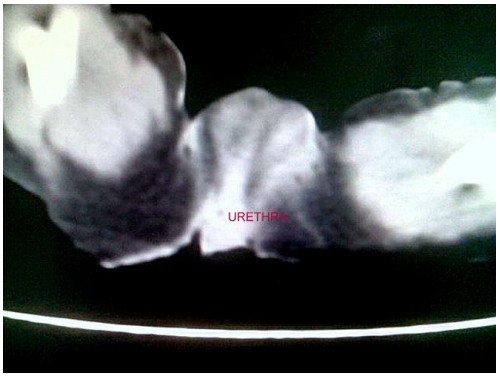

Fig . 6 CT showing urethra posterior to scrotum

Other Investigations

Cardiac- Normal, Skeletal X-rays-Normal Trans cranial USG- Normal

Discussion

CPST is a very uncommon heterogeneous condition in which the scrotum is positioned superior and anterior to the penis. Less than 20 cases of CPST with normal scrotum have been reported in the literature [2]. CPST is frequently associated with major and often life-threatening malformations. Parida et al [3] had noted major renal anomalies in the form of agenesis, horseshoe kidney, ectopic and dysplastic kidney, obstructive uropathy and hydronephrosis. Other systemic abnormalities are mental retardation, anorectal malformations, central nervous system, skeletal and cardiological defects. The embryological explanation of this condition remains elusive. It is postulated that abnormal positioning of the genital tubercle in relation to the scrotal swellings during fourth to fifth week of gestation could affect the migration of the scrotal swellings.[4] Another theory suggests that the phallic tubercle is intrinsically abnormal and affects the corpora's development, which explains the abnormal penis and frequent occurrences of the other genital abnormalities [1]. Kain et al. [5] proposed that abnormality in the gubernaculum could also result in defective migration of the labio-scrotal folds. It should be differentiated from the conditions like pseudo-hermaphroditism, penoscrotal hypospadias, micropenis, intrauterine penile amputation, and specially penile agenesis with a midline skin tag anterior to anus. In presence of normal penis this anomaly does not cause any sexual dysfunction. However, its surgical repair is done for psychological reasons. It is performed usually between 12–18 months[6]

.

References

1. Chadha R, Mann V, Sharma A, Bagga D. Complete penoscrotal transposition and associated malformations. Pediatr Surg Int 1999; 15: 505-507
2. Somaza I, Palacios MG, Mendez R, Vela D. Complete penoscrotal transposition: A threestage procedure. Indian J urol. 2012; 28: 450- 2
3. Parida SK, Hall BD, Barton L, Fujimoto A. Penoscrotal transposition and associated anomalies: report of five new cases and review of the literature. Am J Med Genet. 1995; 59: 68-75
4. Belman AB. The Penis. Urol Clin North Am. 1978;5:17-29
5. Kain R, Arulprakash S. Complete penoscrotal transposition. Indian Pediatr. 2005; 42: 718
6. Mendez-Gallart R, Tellado MG, Somaza I. Extreme penoscrotal transposition. World J Pediatr. 2010; 6: 89