

PARAURETHRAL CYST IN A NEWBORN- A RARE CASE STUDY

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ABSTRACT

Paraurethral cysts are a rare congenital abnormality presenting as interlabial mass in female neonates. These cysts form due to obstruction of the glandular ductus or cystic degeneration of embryonic remnants of the paraurethral glands. Paraurethral glands and ducts that empty into the vaginal vestibule close to the urethral meatus are rudimentary female homologs of the prostate, and the two largest of these ducts are known as Skene's ducts. The differential diagnosis of paraurethral Skene's duct cysts in newborns includes imperforate hymen, Gardner duct cyst, Mullerian duct cyst, urethral prolapse, rhabdomyosarcoma of the vagina, prolapsed ectopic ureterocele, condyloma, urethral polyp, congenital lipoma and vaginal prolapse. The distinguishing features of paraurethral cysts are the displacement of the urethral meatus by the mass and a cyst containing milky fluid. Treatment options vary from observation to surgery. Rarely, Skene's duct cysts require no drainage and resolve with time or rupture spontaneously. This reported case showed spontaneous regression of the cyst in a period of three months. The rare nature of the lesion and spontaneous resolution of the same makes it a rare case study.

KEYWORDS :

CASE REPORT

The patient was a new born female child delivered as a full term uneventful vaginal delivery. The birth weight was 3.1 kgs with normal vital parameters. On examination, found to have a 1.0x 1.5 cm protruding interlabial mass. The mass was oval in shape with pearly white appearance. There were no features of urinary obstruction. There were no features of failure to thrive or any other symptoms. Ultrasound revealed two paired echogenic, well defined lesions measuring approx 1.1 x 1.2cm around vaginal vestibule. The child was karyotyped in view of suspected gonadal dysgenesis which revealed chromosomal configuration of 46,XX. The parents were counselled and child was kept on clinical and sonographic follow up. The lesions gradually regressed and resolved completely in following three months. Finally diagnosed as paraurethral cysts masquerading as gonadal dysgenesis.



Fig 1: Interlabial mass in neonate.



Fig 2: USG showing paired ovoid lesions around vaginal vestibule

DISCUSSION

Paraurethral glands, or Skene's glands, are largest female urethral glands. They are named after Alexander Skene, a Scottish gynaecologist who first described them in 1880. [1] These glands drain by two main ducts draining into distal urethra which are formed by confluence of 6 - 30 ducts proximally. Paraurethral glands are rudimentary analogues to the male prostate [2]. They secrete mucus-like substance that aids in lubrication to the urethral meatus. [3]

The exact incidence of paraurethral duct cysts is unknown. Few studies have reported incidence from 1 in 2000 to 1 in 7200 female births [4]. The etiology of these cysts is also uncertain. Few postulated theories relate to the dislocation of the urothelium from the urogenital sinus into the adjacent area, obstruction of Skene's gland ducts due to a delayed opening of duct, obstruction by a mucus plug or stenosis of the duct [5,6].

Differential diagnoses for interlabial masses include Gartner's duct cysts, inclusion cysts of the vaginal wall, urethral diverticulum, Mullerian remnant cyst, hymenal cyst, prolapsed ectopic ureterocele, vaginal or urethral neoplasms [7].

Clinical examination of external genitalia is diagnostic, however ultrasound can be used to facilitate in narrowing down the differentials. In cases where ambiguous genitalia is coexistent, karyotyping may provide the answer to the confusing scenario.

Various treatment options for paraurethral duct cysts are conservative management by reassurance and careful followup, surgical drainage by aspiration, unroofing and marsupialization in cases of symptomatic, large or non regressing cysts. [8]

Few reports have mentioned spontaneous resolution of cyst within 2-10 months [9]. It is postulated that this if this may be a result of gradual opening of the duct, absorption of the cyst content or spontaneous perforation of the cyst. However, clinical setting along with stress quotient of the parents may result in early surgical management of cysts. [10]

The aim of this case study was to highlight the uncommon phenomenon of paraurethral duct cysts presenting as interlabial mass in a girl neonate and the role of conservative management in such case keeping in mind the stress potential of such condition for the parents in existing social scenario.

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