



Syringocele Presenting as a Scrotal Abscess in a Child

Enrica Rossi* and Piero Pavanello

Department of Pediatric Surgery, Sant'Anna Hospital, Italy

Abstract

Congenital syringocele is a rare cystic dilatation of the Cowper's gland excretory duct. The two Cowper's glands are located within the urogenital diaphragm and two paired accessory glands are situated in the bulbous spongiosal tissue. Although frequently asymptomatic in the pediatric population, syringocele may sometimes cause lower urinary tract symptoms such as INHespecific voiding dysfunction. We report the unusual case of an imperforate syringocele presenting as a scrotal abscess in a child.

Keywords: Syringocele; Scrotal abscess; LFP; LDH

Case Report

A 7-year-old boy presented with a 48-h history of scrotal pain. A 25 mm-scrotal mass, tender on touch, adherent to the surrounding tissues, moderately painful at the examination, was palpable in the midline with local inflammatory signs.

No anomalies were found in both testes at ultrasonography.

The mass was localized inferiorly and in the lower part of the scrotum with hyperechogenic spots in the parenchyma and peripheral vascularization.

Normal levels of catecholamines were revealed in 24-h urine collection. α -fetoprotein (LFP), β -Human Chorionic Gonadotropin (β -HCG), Lactate Dehydrogenase (LDH) were normal.

Nevertheless, an MRI was performed, suspecting a mass of neoplastic origin. The mass was elliptic-shaped, extending from the scrotal septum deeper along the midline until the perineal region, its blind-ending in contiguity with the right bulbourethral Cowper's gland (Figure 1).

Herein imperforate Cowper's syringocele was suspected.

Voiding cystourethrogram and subsequently cystoscopy was realized. No anomalies were seen in the urethra during both examinations. These findings compelled us to open surgery.

A 6-cm longitudinal incision was realized in the scrotum extending towards the perineum. An abscess was found and 20 ml of purulent material were evacuated. Beside the abscess an orifice started, and a cystic, well-capsulated, elliptic, blind-ending formation was dissected along the midline until the right urogenital diaphragm, near the origin of the bulbar urethra (Figure 2 and 3).

Results of the histologic examination were INHespecific, revealing only fibrous tissue and inflammatory cells.

Discussion

Syringocele is a cystic dilatation of the bulbourethral gland duct. Following Maizels classification

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*Correspondence:

Enrica Rossi, Department of Pediatric Surgery, Sant'Anna Hospital, Corso Giovecca 203, 44100 Ferrara, Italy, Tel: 0039 0532 236580; Fax: 0039 0532

247107;

E-mail: dr_ross28@hotmail.com

Received Date: 21 Aug 2020

Accepted Date: 25 Sep 2020

Published Date: 28 Sep 2020

Citation:

Rossi E, Pavanello P. Syringocele Presenting as a Scrotal Abscess in a Child. *Clin Surg*. 2020; 5: 2958.

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Figure 1: MRI images of the elliptic perineal cyst.

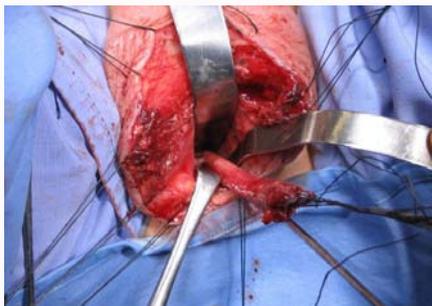


Figure 2: Blind-ending cyst at operation.



Figure 3: Aspect of the cyst.

introduced in 1983 [1], 4 types of syringocele are recognized: Simple, perforate, imperforate and ruptured. Actually, in the literature, most authors recognize only two types: open (with reflux from the urethra to the dilated cavity of the excretory duct) and closed (obstructive) [2].

Retrograde cistourethrogram and cystoscopy are the gold standard for diagnosis. In the pediatric population the overall incidence of syringocele at voiding cystourethrogram is estimated to be 1.5% [3,4].

Transurethral marsupialisation is the treatment of choice in symptomatic cases. In some cases, surgical resection through a perineal approach is necessary.

Clinical presentation as a scrotal mass, subsequently recognized as an abscess, is unusual. In our case an imperforate syringocele was suspected only at MRI. Therefore, perineal MRI may be useful in cases when voiding cistourethrography and endoscopy are unhelpful.

References

1. Maizels M, Stephens FD, King LR, Firlit CF. Cowper's syringocele: A classification of dilatation of Cowper's gland duct based upon clinical characteristics of 8 boys. *J Urol.* 1983;129(1):111-4.
2. Bevers RFM, Abbekerk EM, Boon TA. Cowper's syringocele: Symptoms, classification and treatment of an unappreciated problem. *J Urol* 2000;163(3):782-4.
3. Tanga M, Manchia A, Dolezalova H, Imbriaco M, Sodano A. Syringocele of the Cowper's gland: Report of two cases in the childhood. *Eur J Radiol Extra.* 2004;49(3):111-3.
4. Brock WA, Kaplan GW. Lesions of Cowper's glands in children. *J Urol.* 1979;122(1):121-3.