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RESEARCH ARTICLE

MÜLLER CYST IN A YOUNG PATIENT

Dr. Ouatar Khalid , Dr. Benamar Mohammed, Pr. Ahssaini Mustapha, Pr. Mellas Soufiane, Pr. Tazi Mohamed Fadl, Pr. El Ammari Jalal Eddine, Pr. Mohammed Jamal El Fassi and Pr. Farih Moulay Hassan
Urology Department, Chu Hassan Ii Fes.

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Abstract

Müller cyst is very rare. It is found in about 5% of azoosperm patients. It is a residual embryological vestige of the female genital organ in men. It is a collection developed in the residual uterine cavity of man called the prostatic utricle. [1] it is a benign lesion, most often congenital, rarely acquired. This lesion may be asymptomatic or symptomatic, and may in rare cases be associated with renal agenesis. [2] various means of treatment, treatment is compulsory for cysts that are symptomatic and / or complicated by subfertility. We report here a case of müller's cyst in a young patient treated by puncture and evacuation.

Introduction:-

Müller cyst is very rare. It is found in about 5% of azoosperm patients.

It is a residual embryological vestige of the female genital organ in men. It is a collection developed in the residual uterine cavity of man called the prostatic utricle. [1]

It is a benign lesion, most often congenital, rarely acquired. This lesion may be asymptomatic or symptomatic, and may in rare cases be associated with renal agenesis. [2]

Various means of treatment, treatment is compulsory for cysts that are symptomatic and / or complicated by subfertility.

We report here a case of Müller's cyst in a young patient treated by puncture and evacuation.

Observation:-

This is a 19-year-old patient, without medical antecedents, who consults for intermittent pelvic pain, heaviness type, associated with urination burns, pollakiuria and low ejaculatory volume ; without hemospermia, with a few episodes of enuresis, evolving for 2 years.

On clinical examination, a small benign prostate was found on digital rectal exam, with no associated perception ofmass.

The rest of the exam was normal.

Corresponding Author:- Dr. Ouatar Khalid
Address:- Urology Department, Chu Hassan Ii Fes.

The initial laboratory results showed : Hémoglobin 14.7; White blood cell 5590; Platelets 195,000; Creatinine 8; Urea 0.19, C-reactive protein 0; cytobacteriological examination of the urine was sterile.

A suprapubic ultrasound revealed a well-defined hypoechoic median lesion of regular contours, rounded in shape in the central zone of the prostate measuring 1.3 cm and 2 cm (figure 1).

The pelvic MRI revealed a prostate of normal size with site in the central zone of a median lesion, well defined, of regular contours, rounded in shape; described in T1 hypointense, restrictive T2 hypersignal in DW and unmodified after contrast measuring 15 * 22 mm in favor of a Mullerian cyst. (figure 2) The patient underwent a transrectal puncture of the cyst by endorectal ultrasound, revealing a non- purulating brownish fluid.

The cytology of the puncture fluid of the Müllerian cyst had returned in favor of an inflammatory cytology with the absence of cells suspected of malignancy.

Currently, the patient does not complain of pelvic pain, irritative syndrome or bedwetting and reports an improvement in ejaculation volume.

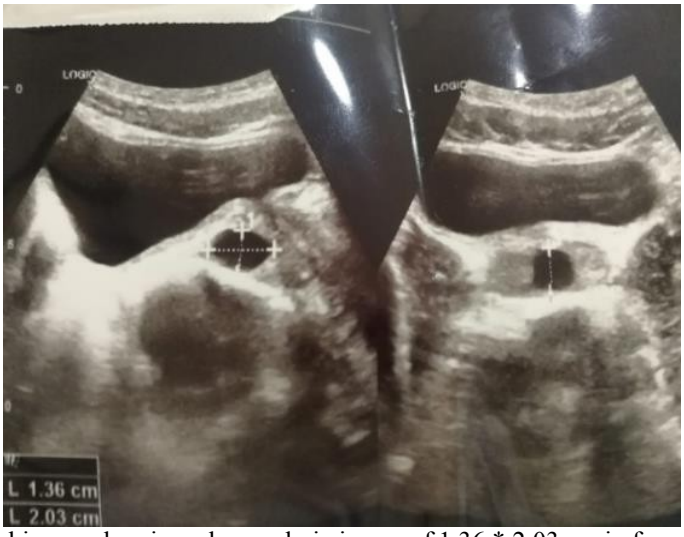


Figure 1:- Ultrasound image showing a hypoechoic image of 1.36 * 2.03 cm in favor of a Müllerian cyst.

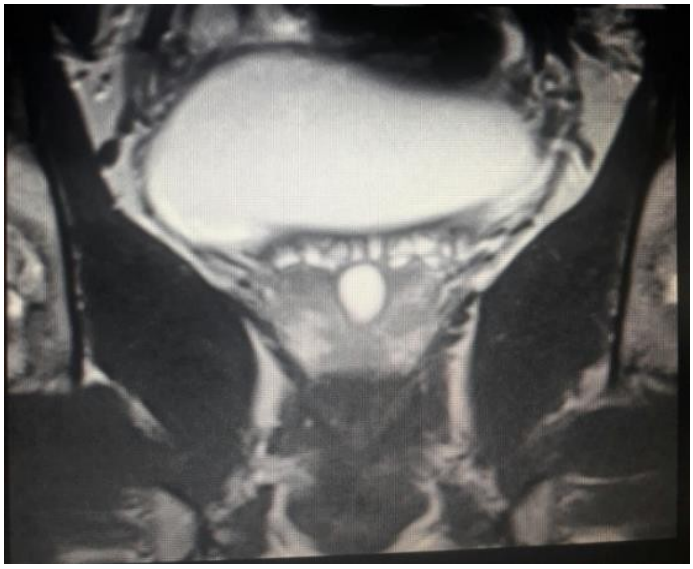


Figure 2:- Image of a section of an MRI showing a median cystic image measuring 1.5 * 2cm in favor of a Müllerian cyst.

Discussion:-

Müllerian cyst is very rare, its incidence varies from 1 to 7.6% [3,4]. The origin is most often congenital, it may be due to a developmental disorder affecting the Müllerian remains. [5] Cystic dilation of the prostate utricle is most often congenital, it derives from an anomaly in the involution of the caudal end of the Müllerian apparatus, due to insufficient antimüllerian hormone [6].

Genitourinary malformations are often associated with it, particularly proximal hypospadias, cryptorchidism and, more rarely, renal hypoplasia or aplasia. [7.8]

Müller's cyst can cause obstruction of the ejaculatory ducts by bilateral extrinsic compression, causing oligospermia or azoospermia of excretory origin. [5]

Circumstances of discovery:
Very variable, Indeed, these cysts are often asymptomatic, in the opposite case, the patients can consult for signs of bladder irritation, namely pollakiuria, urge to urinate, or, conversely, a dysuria or even a urinary retention; the abnormality may manifest as a complication such as hemospermia, infection, oligospermia or azoospermia.

Physical examination:
Especially the rectal examination which can highlight a median fluid mass renitente intra prostatic, of different volumes. [5]
The remainder of the physical examination will be completed with an examination of the external genitalia looking for any associated pathology such as hypospadias, cryptorchidism or other malformative uropathy.

Paraclinical examinations:
The Spermogram: may show azoospermia or oligospermia. [9]

Cytological and bacteriological analysis of the contents of the cyst: which is of great help in determining the nature of the cystic formation. This is because cysts of Müllerian origin contain a yellowish fluid, characterized by the absence of sperm. [10]

Prostatic ultrasound By suprapubic or endorectal route: it presents a double diagnostic and therapeutic interest. [11.12]

Computed tomography Scan: allows you to visualize the cyst, its size and the state of the prostate, as well as to highlight any associated abnormalities of the urogenital system.

Magnetic resonance imaging (MRI): same information as scan with more precision.

Differential diagnoses:
These are the acquired intra prostatic cysts [13]
1. retention cyst in benign prostatic hyperplasia: intra-prostatic cyst, paramedian, in the transition zone or the midlobe, often small and multiple.
2. canalicular ectasia of the prostatic ducts of the peripheral or transition zone.
3. parasitic cyst (bilharzia): rare.
4. residual cavity after an abscess after acute prostatitis: thick walls, calcification, evocative antecedent.
5. Chronic prostatitis cyst: multiple small intraprostatic cysts of variable size giving the appearance of a
6. "Gruyere" prostate.
7. cyst acquired from the ejaculatory duct following a post infectious obstruction of the duct (fibrous stenosis, wall calcification) or compression by a median cyst; possibility of dilation of the ipsilateral seminal vesicle.

Treatement:
Different operating techniques can be used.

Percutaneous techniques by puncture-aspiration of the cyst:
Ultrasound-guided puncture is performed perineal or transrectal. [12,14] After aspiration of the contents of the cyst and in the absence of spermatozoa in the cystic fluid, this procedure can be terminated by an injection of sclerosing products. This technique is effective immediately, but the risk of recurrence is not negligible. [14]

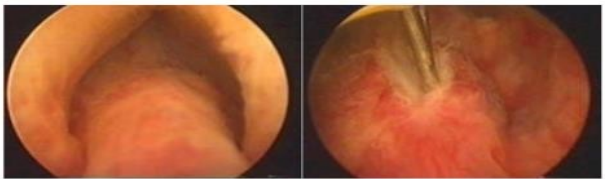
Endoscopic techniques:
The transurethral incision of the cyst on the anterior wall of the cyst while respecting the sphincter region. [8]
Endoscopic resection of the anterior wall of the cyst.

Surgical excision techniques:
Surgical excision is the usual treatment in children, it offers the possibility of complete excision of the cyst, but it is a delicate surgery.

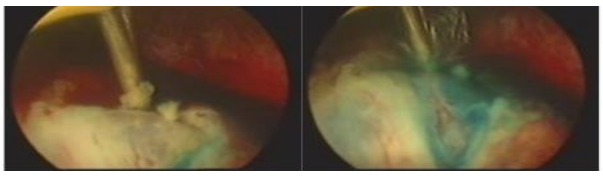
Sometimes, the cyst is not clearly visible during endoscopy, so it is necessary to continue to swell the cyst to make it appear (figure 3). [1]

Several approaches are possible:
Transvesical or transtrigonal abdominal approach. [15]
Suprapubic extravesical abdominal approach. [5]
Posterior transrectal approach. [16]

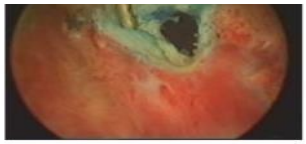
Figure 3:- Images showing the surgical technique of cyst removal.



Verru montanum verru montanum incision



inflation and incision of the cyst



Conclusion:-

Muller's cyst is a rare disease that can remain asymptomatic or give symptoms ranging from irritative syndrome to infertility. Diagnosis is easy by means of imaging, including endorectal ultrasound and MRI. The management is mainly for symptomatic or complicated cysts of subfertility, patients may benefit from endoscopic treatment or surgical excision of the cyst.

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