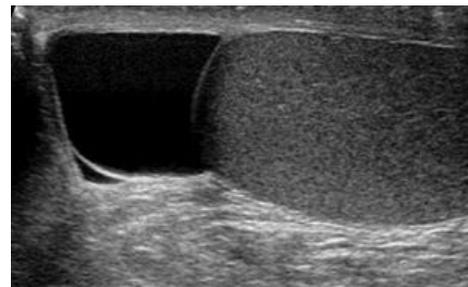


Spermatocele

A **spermatocele** is a benign, painless cystic mass that is filled with **seminal fluid and may also contain sperm**. It is usually located above or behind the testicle, but it is palpably separate from the testicle. Spermatocele occurs in men of any age, the size is usually up to 10 mm, but some can be significantly larger. The cause of its formation is not clear, it is assumed that it arises from the expansion of the tubules with subsequent fluid retention.

Clinical picture

In most cases, spermatocele is **asymptomatic**, it can be detected during palpation. A larger formation can cause a feeling of heaviness and pressure in the scrotum, patients can feel a larger spermatocele themselves.



Ultrasound imaging of the spermatocele: the testis is homogeneously echogenic, the fluid in the spermatocele is anechoic (black)

Diagnostics and differential diagnosis

The basis of diagnosis is anamnesis. We ask the patient about the duration, we are interested in whether the formation arose in connection with inflammation or trauma. We examine the scrotum by palpation standing and lying down, we find a palpable mass. We use an **ultrasound examination** to confirm the spermatocele.

In the **differential diagnosis** we must distinguish between **hydrocele**, **varicocele** and **cancer** in the area of the testicle or epididymis. The hardness of the testicle indicates a tumorous finding, the more elastic the formation, the greater the probability that it is a spermatocele. Oncological origin is more suspected in younger men, in whom the incidence of testicular tumors is higher. Pain is not a typical symptom of either a tumor or a spermatocele.

Tumor markers will also help us differentiate - we collect **alfa-fetoprotein**, **β -hCG**, we are also interested in the value of **lactate dehydrogenase** (serum concentration of LDH is suitable for monitoring the growth and regression of various malignancies) ^[1].

Therapy

In therapy, we choose between conservative and operative solutions. In asymptomatic patients with a smaller spermatocele, we usually just observe the finding. Aspiration of the contents of the cyst is possible, but the fluid usually replenishes over time.

Symptomatic spermatoceles are indicated for surgical treatment, we perform simple **enucleation from the scrotal approach**. The procedure takes place under general or spinal anesthesia and takes approximately thirty minutes. After opening the testicles, we remove the entire cystic formation.

We choose therapy individually for infertile men with azoospermia. The contents of the spermatocele may be the last possible source of sperm that we could obtain for assisted reproduction methods.

The main complications of surgery are testicular atrophy and recurrence of spermatocele.

Links

Related articles

- Hydrocele
- Varicocele

Reference

1. ABRAHÁMOVÁ, Jitka. Testicular tumors. *Postgraduate medicine* [online]. 2003, y. 5, vol. 6, p. 599-615, Available from <<https://zdravi.euro.cz/clanek/postgradualni-medicina/nadory-varlat-156493>>.

Recommended literature

- HANUŠ, Tomáš – MACEK, Petr, et al. *Urology for medical professionals*. 1. edition. 2015. 305 pp. ISBN 9788024630083.
- 1. *Doporučené postupy pro praktické lékaře, Hydrokéla, varikokéla, spermatokéla*. 2002. pp. 2-3. Available from <www.cls.cz/dokumenty2/os/t178.rtf>.

