

Evaluation of spermiogram

- Quantitative microscopic analysis of ejaculate obtained after 2-4 days of sexual abstinence by masturbation or captured during sexual intercourse in a condom made of a special material that does not damage sperm.^[1]
- In recent years, there has been a permanent deterioration of the spermiogram:
 - in 1951 the lower limit was 80 mil./ml, in 1964 it was revised to 40 mil./ml, in 1980 to 20 mil./ml and in 2010 WHO established 15 mil./ml as the norm.^[2]

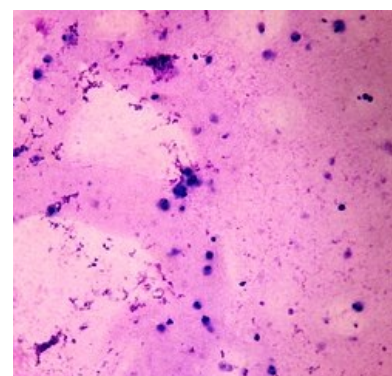
Normal spermiogram

- After 2-7 days of sexual abstinence:
 - volume 1.5-4.8 ml;
 - pH 7,2-7,8;
 - sperm above 15 million/ml;
 - total movement: 40 %
 - progressive movement: 32 %
 - morphology: normal forms of sperm: 4 %

Findings

If we talk about the quality/quantity of the ejaculate as such, we use the suffix - **spermia**, but if we want to comment on the number or characteristics of the sperm contained in the ejaculate, we use the suffix - **zoospermia**. It is good to be aware of this distinction in terminology, as it is often mistaken.

- **aspermia** – complete absence of ejaculate (no ejaculate formed or retrograde ejaculation);
- **pyospermia** – leukocytes in the ejaculate;
- **hemospermia** – erythrocytes in the ejaculate;
- **normozoospermia** – parameters are within normal limits;
- **oligozoospermie**:
 - below 15 mil./ml, the probability of fertilization may be reduced ^[3]
 - drop below 5 million/ml – oligospermia gravis;
- **asthenozoospermia** – sperm movement is lower than normal, higher percentage of defective forms;
- **teratozoospermia** – too many morphologically abnormal sperm;
- **azoospermia** – sperm are absent:
 - obstructive;
 - testicular;
- **necrozoospermia** – only avital sperm are present;
- **cryptozoospermia** – the absence of sperm in the native sample, after centrifugation the presence of a small amount of sperm (serves to distinguish azoospermia, which most often has an obstructive etiology, from a serious disorder of the germinal epithelium)
- combination of the above pathologies: **oligoasthenozoospermia, oligoasthenoteratozoospermia, asthenoteratozoospermia, oligoteratozoospermia**.



Ejaculate sample - azoospermia with multiple leukocytes (pyospermia)

Links

Related Articles

- Assisted reproduction
- Gametogenesis
- In vitro fertilization

Source

- BENEŠ, Jiří. *Studijní materiály* [online]. [cit. 2010]. <<http://jirben.wz.cz>>.

References

1. Gonadosan GmbH. *Kvalita spermií* [online]. [cit. 2011-10-03]. <<https://www.fertilovit.com/cs-cz/kinderwunsch/spermienqualität.aspx>>.
2. http://www.sexuologickaspolecnost.cz/dokumenty/WHO_manual.pdf
3. <http://www.sexuologickaspolecnost.cz/vlastnosti-ejakulatu>

