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THE VETERINARY DEPARTMENT ADVISES: EJACULATE EVALUATION (Vol.2)

In the previous advice, we evaluated mobility and agglutination. In the current one, we look at the percentage of abnormal forms.

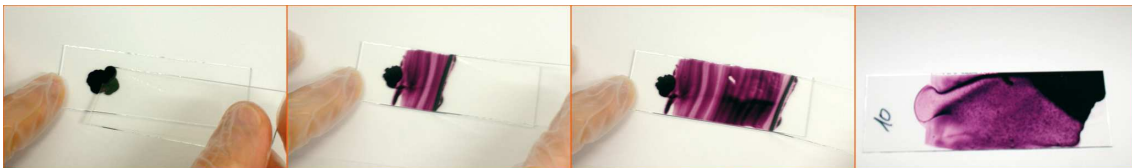
Good equipment is needed that meets our needs and is in good order.

Requirements: immersion lens (100x), and where appropriate, a phase-contrast filter and lens.

Classification by origin of morpho-anomalies:

- Primary: Testicular origin, e.g. abnormal heads.
- Secondary: during the maturing process. Tails and cytoplasmic drops.
- Tertiary: Caused by the operator following ejaculation, e.g. presence of whip-shaped or rolled-up tails due to very cold materials or hypo-osmotic solutions.

It is preferable to use an extension to count abnormal forms, with eosin-nigrosin (clear field), or a phase-contrast microscope (most frequent methods).



These are very fast methods that allow an accurate assessment of the presence of morpho-anomalies and the state of the acrosome. The first method also enables a

fairly assessment of the vitality and the presence of contamination, whereas the second does not require any staining.

The assessment of the concentration of abnormal forms in the counting chamber (e.g. Bürker), although swift, uses a fairly low number of sperm cells for reference (between 15 and 45 cells). This procedure is carried out at 40x, which leads to a loss of detail and information.

When an assessment is carried out using the immersion lens (100x), do not count more than 10 cells in a single field.

It is advisable to calculate the percentage using a minimum of 50 sperm cells, with the preferred minimum being 100 sperm cells.

Temper all materials used for the count (pipettes, holders, covers, formulated solutions, etc.), especially at low ambient laboratory temperatures. Thermal shock may induce the appearance of sperm cells with whip-shaped or rolled-up tails, leading to inaccurate results.

It is advisable not to prepare sperm doses that contain abnormal forms in excess of 25% (without counting distal cytoplasmic drops), or in excess of 40%, including distal drops. Taking into account its degree of maturity and rapid progressive movement, the distal cytoplasmic drop is held to be an anomaly with low repercussion at not very high percentages (under 15-20%).

Recommended values:

- Heads: <5 %
- Tails: <10 %
- Proximal drops: <10 %

It is advisable to use eosin-nigrosin containers for more frequent renewal, so as to avoid possible contamination and the presence of nodules.

It is recommended that an evaluation be done of the presence of abnormal forms in all the ejaculates, given the amount of information thus obtained and as a tool for early diagnosis of possible suboptimal situations.