HEALTH HOLDING

HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

Department:	Laboratory and Blood Bank (Parasitology)		
Document:	Internal Policy and Procedure		
Title:	Semen Analysis		
Applies To:	Clinical Pathologist		
Preparation Date:	January 02, 2025	**Index No:**	LB-IPP-025
Approval Date:	January 16, 2025	**Version:**	2
Effective Date:	February 16, 2025	**Replacement No.:**	LB-IPP-025 (1)
Review Date:	February 16, 2028	**No. of Pages:**	02

1. PURPOSE:

1.1 To establish system and set responsibility for work so the semen analysis will be perfectly performed.

2. DEFINITONS:

N/A

3. POLICY:

3.1 A complete semen analysis measures the quantity and quality of the fluid released during ejaculation. It evaluates both the liquid portion, called semen or seminal fluid, and the microscopic, moving cells called sperm. It is often used in the evaluation of male infertility.
3.2 Sample of semen should be collected by the patient in clean, dry container
3.3 Patient must be provided with specific instruction for collection.
3.4 Semen sample should be examined physically and microscopically.
3.5 For infertility testing, the sample must be analysed within one hour of collection. Two separate collections on two separate days may be required.

4. PROCEDURE:

4.1 Sample of semen collected by the patient in clean, dry container.
4.2 Patients must be provided with specific instructions for collection and prompt delivery of a semen sample to the laboratory. This should be written in simple terms in a language readily understood by the patient. Elements should include the need to obtain from ejaculation for 3-5 days before masturbation, avoidance of lubricants and other contamination, completeness of collection, use of the supplied container, maintenance of sample temperature, and prompt delivery.
4.3 Examination of a fresh ejaculate is important for assessment of motility and must be performed within one hour of receipt.
4.4 Examination by naked eye for amount, colour, viscosity and Ph and all characteristics of semen must be noted and reported in forms of semen analysis.
4.5 All semen specimens must be given sufficient time for liquefaction before testing and incubate at 37°C by use of an incubator.
4.6 Microscopic examination done after liquefaction, a small drop after well mixing and shaking under a cover glass to show motility (progressive, non-progressive or non-motile) or not in situ.
4.7 Viability test is done by using Eosin-Y staining (0. 5% wt/vol), This test performed by mixing lml of semen with 1 ml of the stain on a microscope slide and covered with a cover slide, a total of 100 spermatozoa were then counted within 2 min after the addition of stain. results were expressed as the percentage of unstained (live) sperm.
4.8 Report also on pus cells, red cells, spermatogenic cells, ova, parasites and sperm agglutination/HPF.
4.9 For azoospermia specimens, as well as post-vasectomy checks for sterility, a concentrating technique must be employed on the seminal fluid sample. Without such an approach, the presence of both motile and non-motile sperm may not be detected.

4.10 Report on morphology and abnormal forms.

4.11 Sperm count done after liquefaction by dilute 1/20 with a solution (containing 5g.NaHco3) 1 ml formalin in 100 ml distilled water),let mixture stand until mucus dissolves shake thoroughly fill hemocytometer counting chamber and count as for white blood cells. And multiply by million gives number per ml.

4.12 Interpretation should be conservative as findings vary considerably in the normal, abnormalities may be temporary.

5. MATERIALS AND EQUIPMENT:

N/A

6. RESPONSIBILITIES:

6.1 The assigned doctor will perform and interpret the result

7. APPENDICES:

N/A

8. REFERENCES:

8.1 Textbook of clinical embryology semen analysis and preparation pp.239-249 Cambridge university press 2013

9. APPROVALS:

	Name	Title	Signature	Date
Prepared by:	Dr. Talal Abdelgawad	Clinical Pathologist		January 02, 2025
Reviewed by:	Dr. Kawther M. Abdou	Consultant & Lab. Medical Director		January 07, 2025
Reviewed by:	Ms. Noora Melfi Alanizi	Laboratory & Blood Bank Director		January 08, 2025
Reviewed by:	Mr. Abdulelah Ayed Al Mutairi	QM&PS Director		January 12, 2025
Reviewed by:	Dr. Tamer Mohamed Naguib	Medical Director		January 12, 2025
Approved by:	Mr. Fahad Hazam Alshammari	Hospital Director		January 16, 2025