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 Chairman & Consultant Pathologist

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 CEO & Consultant Pathologist

<b>NAME</b>	: Mr. SAHIL	<b>PATIENT ID</b>	: 1806705
<b>AGE/ GENDER</b>	: 30 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012503260014
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 26/Mar/2025 08:52 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 26/Mar/2025 08:53AM
<b>BARCODE NO.</b>	: 01527774	<b>REPORTING DATE</b>	: 26/Mar/2025 04:18PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
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## ENDOCRINOLOGY

### FOLLICLE STIMULATING HORMONE (FSH)

FOLLICLE STIMULATING HORMONE (FSH): SERUM 15.24  
 by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)

mIU/mL

FEMALE FOLLICULAR PHASE:  
 2.0 - 15.0  
 FEAMLE LUTEAL PHASE: 2.0 -  
 12.0  
 FEMALE OVULATORY PHASE:  
 2.0 - 25.0  
 MENOPAUSAL: >40.0  
 PREGNANCY: 0.0 - 12.0  
 PRIMARY OVARIAN FAILURE:  
 40.0 - 150.0  
 MALE: 2.0 - 15.0

#### INTERPRETATION:

1. Gonadotropin-releasing hormone from the hypothalamus controls the secretion of the gonadotropins, follicle-stimulating hormone (FSH) and luteinizing hormone (LH) from the anterior pituitary.
2. The menstrual cycle is divided by a midcycle surge of both FSH and LH into a follicular phase and a luteal phase.
3. FSH appears to control gametogenesis in both males and females.

#### The test is useful in the following settings:

1. An adjunct in the evaluation of menstrual irregularities.
2. Evaluating patients with suspected hypogonadism.
3. Predicting ovulation
4. Evaluating infertility
5. Diagnosing pituitary disorders
6. In both males and females, primary hypogonadism results in an elevation of basal follicle-stimulating hormone (FSH) and luteinizing hormone (LH) levels.

#### FSH and LH LEVELS ELEVATED IN:

1. Primary gonadal failure
2. Complete testicular feminization syndrome.
3. Precocious puberty (either idiopathic or secondary to a central nervous system lesion)
4. Menopause (postmenopausal FSH levels are generally >40 IU/L)
5. Primary ovarian hypofunction in females
6. Primary hypogonadism in males

#### NOTE:

1. Normal or decreased FSH is seen in polycystic ovarian disease in females
2. FSH and LH are both decreased in failure of the pituitary or hypothalamus.





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<b>BARCODE NO.</b>	: 01527774	<b>REPORTING DATE</b>	: 26/Mar/2025 12:03PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
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Test Name	Value	Unit	Biological Reference interval
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**TESTOSTERONE: TOTAL**

TESTOSTERONE - TOTAL: SERUM	2.27	ng/mL	0.47 - 9.80
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by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

**INTERPRETATION:**

1. Testosterone is secreted in females by the ovary and formed indirectly from androstenedione in adrenal glands.
2. In males it is secreted by the testes. It circulates in blood bound largely to sex hormone binding globulin (SHBG). Less than 1% of the total testosterone is in the free form.
3. The bioavailable fraction includes the free form and that "weakly bound" to albumin (40% of the total in men and 20% of the total in women) and bound to cortisol binding globulin (CBG). It is the most potent circulating androgenic hormone.
4. The total testosterone bound to SHBG fluctuates since SHBG levels are affected by medication, disease, sex steroids and insulin.

**CLINIC USE:**

1. Assessment of testicular functions in males
2. Management of hirsutism and virilization in females

**INCREASED LEVELS:**

1. Precocious puberty (Males)
2. Androgen resistance
3. Testotoxicosis
4. Congenital Adrenal Hyperplasia
5. Polycystic ovarian disease
7. Ovarian tumors

**DECREASED LEVELS:**

1. Delayed puberty (Males)
2. Gonadotropin deficiency
3. Testicular defects
4. Systemic diseases

\*\*\* End Of Report \*\*\*





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