

PKR JAIN HEALTHCARE INSTITUTE NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

■ 0171-2532620, 8222896961 **■** pkrjainhealthcare@gmail.com

NAME : Mrs. ASMITA

AGE/ GENDER : 43 YRS/FEMALE **PATIENT ID** : 1534383

COLLECTED BY REG. NO./LAB NO. : 122407010011

REFERRED BY **REGISTRATION DATE** : 01/Jul/2024 11:28 AM BARCODE NO. : 12503393 **COLLECTION DATE** : 01/Jul/2024 11:49AM CLIENT CODE. : P.K.R JAIN HEALTHCARE INSTITUTE REPORTING DATE : 01/Jul/2024 03:59PM

CLIENT ADDRESS : NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA

Test Name Value Unit **Biological Reference interval**

ENDOCRINOLOGY

FOLLICLE STIMULATING HORMONE (FSH)

10.63 mIU/mI FOLLICLE STIMULATING HORMONE (FSH): SERUM FEMALE FOLLICULAR PHASE: 2.0 by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)

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. Menopausa (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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VITAMINS

VITAMIN D/25 HYDROXY VITAMIN D3

VITAMIN D (25-HYDROXY VITAMIN D3): SERUM by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)

11.1^L

ng/mL

DEFICIENCY: < 20.0

INSUFFICIENCY: 20.0 - 30.0 SUFFICIENCY: 30.0 - 100.0

TOXICITY: > 100.0

INTERPRETATION:

DEFICIENT:	< 20	ng/mL
INSUFFICIENT:	21 - 29	ng/mL
PREFFERED RANGE:	30 - 100	ng/mL
INTOXICATION:	> 100	ng/ml

1. Vitamin D compounds are derived from dietary ergocalciferol (from plants, Vitamin D2), or cholecalciferol (from animals, Vitamin D3), or by conversion of 7- dihydrocholecalciferol to Vitamin D3 in the skin upon Ultraviolet exposure.

2.25-OH--Vitamin D represents the main body resevoir and transport form of Vitamin D and transport form of Vitamin D, being stored in adipose tissue and tightly bound by a transport protein while in circulation.

3. Vitamin D plays a primary role in the maintenance of calcium homeostatis. It promotes calcium absorption, renal calcium absorption and phosphate reabsorption, skeletal calcium deposition, calcium mobilization, mainly regulated by parathyroid harmone (PTH).

4. Severe deficiency may lead to failure to mineralize newly formed osteoid in bone, resulting in rickets in children and osteomalacia in adults.

DECREASED:

- 1.Lack of sunshine exposure
- 2.Inadequate intake, malabsorption (celiac disease)
 3.Depressed Hepatic Vitamin D 25- hydroxylase activity
- 4. Secondary to advanced Liver disease
- 5. Osteoporosis and Secondary Hyperparathroidism (Mild to Moderate deficiency)
- 6.Enzyme Inducing drugs: anti-epileptic drugs like phenytoin, phenobarbital and carbamazepine, that increases Vitamin D metabolism.

1. Hypervitaminosis D is Rare, and is seen only after prolonged exposure to extremely high doses of Vitamin D. When it occurs, it can result in severe hypercalcemia and hyperphophatemia.

CAUTION: Replacement therapy in deficient individuals must be monitored by periodic assessment of Vitamin D levels in order to prevent hypervitaminosis D

NOTE:-Dark coloured individuals as compare to whites, is at higher risk of developing Vitamin D deficiency due to excess of melanin pigment which interefere with Vitamin D absorption.

*** End Of Report ***



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