Name : MR. SPECIMEN REPORT		Registered on :	06/02/2022 12:38:06
Pat. ID : 2202065	Age : 28 Yrs. 3 Mn. 22 Day Gender : M	Received on :	07/02/2022 11:32:00
Ref. By : FAMILY PHYSICIAN		Reported on :	07/02/2022 11:32:58

Investigation(s): S.Uric Acid

Test Name	Value	Unit	Normal Value
Serum Uric Acid	3.74	mg%	3.4 - 7.0

Reference Range
The final breakdown product of purine catabolism in humans is uric acid. The liver and intestinal mucosa produce most of the uric acid. The kidneys eliminate two thirds of the uric acid, with the GI tract excreting the other one third. Uric has a pKa of 5.75 and 10.3 and thus is a weak acid. The ionized forms of uric acid, urates, are present in synovial fluid and in plasma; approximately 98% exists as monosodium urate, with a pH of 7.4.

The reference ranges for uric acid are as follows:
- Men: 3.4 - 7.0 mg/dL
- Women: 2.4 - 5.7 mg/dL

Serum urate concentrations in most children range from 3-4 mg/dL. During male puberty, levels begin to rise. Female levels remain low until menopause. Adult men have mean serum urate values of 6.8 mg/dL, and premenopausal women have mean serum urate values of 6 mg/dL. Values for women increase after menopause and approximate those of men. Throughout adulthood, concentrations rise steadily and can vary with height, blood pressure, body weight, renal function, and alcohol intake.

Interpretation
Elevated uric acid levels can be seen in • Gout• Renal failure• Destruction of massive amounts of nucleoproteins (leukemia, anemia, chemotherapy, toxemia of pregnancy, psoriasis, sickle cell anemia, hemolytic anemia, polycythemia, resulting pneumonia)• Drugs (especially diuretics, barbiturates)• Lactic acidosis • Hypothyroidism • Chronic kidney disease• Parathyroid diseases • Low-dose salicylates • Metabolic acidosis • Diet (high-protein weight-reducing diet, alcohol, liver, and sweetbread)
• Chronic lead poisoning• Down syndrome• Polycystic kidney disease• Sarcoidosis • Lesch-Nyhan syndrome• Von Gierke disease• Chronic berylliosis.

Decreased uric acid levels can be seen in • Drugs such as uricosuric drugs (salicylates, probenecid, allopurinol), estrogen, phenothiazines, indomethacin, corticotropin • Syndrome of inappropriate antidiuretic hormone secretion (SIADH) with hyponatremia • Wilson disease • Fanconi syndrome • Acromegaly • Celiac disease • Xanthinuria

***** End of Report(s) *****

LABORATORY REPORT(S)

Joyace (Quality Control) M. Mustafa (Sr. Lab. Tech.) Dr. D. Garg MD (Pathology)

Note - If result(s) of test(s) is / are alarming or surprising or with error(s), please contact or visit us immediately for possible remedial action(s).