



Laboratory Service Manual

Lab Dept: Urine/Stool

Test Name: 17-HYDROXYPROGESTERONE, URINE

General Information

Lab Order Codes: 17HU

Synonyms: 17-Hydroxy Progesterone, Urine; 17-OH Progesterone, Urine

CPT Codes: 83498 – Hydroxyprogesterone, 17-d

Test Includes: Total Urine 17-Hydroxyprogesterone level measured in ug/24 hours and Urine Creatinine measured in ng/mg creatinine.

Logistics

Test Indications: 17-Hydroxy Progesterone is a steroid derived from enzymatic metabolism of Progesterone and 17-Hydroxy Pregnenolone. It is converted enzymatically to Androstenedione and 11-Deoxycortisol. It is produced in both the gonads and adrenal glands. It is excreted into the urine in conjugated and unconjugated forms of 17-Hydroxy Progesterone and as Pregnanetriol. This assay measures the total of the conjugated and unconjugated forms. It is stimulated by ACTH and suppressed by Dexamethasone. Levels of urine 17-Hydroxy Progesterone are greatly increased in patients with Polycystic Ovarian Disease and Congenital Adrenal Hyperplasia and show exaggerated responses to ACTH in these cases. 17-Hydroxy Progesterone is the marker steroid for determining cases of 21a-Hydroxylase Deficient Congenital Adrenal Hyperplasia. Urine levels are frequently elevated in patients with idiopathic hirsutism.

Lab Testing Sections: Urine/Stool - Sendouts

Referred to: Mayo Medical Laboratories (MML Test# 90170) and forwarded to Inter Science Institute

Phone Numbers:

Minneapolis: 612-813-6280

Saint Paul: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 – 7 days; performed Monday - Friday

Special Instructions: Refrigerate or keep specimen on ice during 24 hour collection. There is no preservative. [See Patient Preparation.](#)



Laboratory Service Manual

Specimen

Specimen Type:	Urine, 24 hour collection
Container:	Plastic, leak-proof urine collection container
Draw Volume:	Entire collection
Processed Volume:	5.0 mL of urine from a well-mixed 24 hour collection
Collection:	Routine 24 hour urine collection, refrigerate or keep on ice
Special Processing:	Lab Staff: Mix 24 hour specimen well. Measure and record total urine volume. Remove 5.0 mL aliquot into a screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.
Patient Preparation:	Patient should not be on any Corticosteroid, ACTH, steroid, estrogen, or gonadotropin medication, if possible, for at least 48 hours prior to start of urine collection.
Sample Rejection:	Specimens other than urine, mislabeled specimens

Interpretive

Reference Range:	17-Hydroxyprogesterone:
	Age Range
	3 days – 1 year: Up to 50 ng/24 hours
	1 – 8 years: Up to 300 ng/24 hours
	Adult Males: Up to 2.0 ug/24 hours
	Adult Females: Up to 4.5 ug/24 hours
	Creatinine:
	3 days – 1 year: Up to 0.10 ng/mg creatinine
	1 – 8 years: Up to 0.50 ng/mg creatinine
	Adult Males: Up to 1.00 ng/mg creatinine
	Adult Females: Up to 2.00 ng/mg creatinine
Critical Values:	N/A



Laboratory Service Manual

Limitations:	N/A
Methodology:	Radioimmunoassay (RIA) following extraction of specimens
Contraindications:	N/A
References:	Mayo Medical Laboratory Web Page http://www.mayoreferenceservices.org/mrs/mml/mml-test.asp May 2005