Laboratory Service Manual

Lab Dept: Urine/Stool

Test Name: ALDOSTERONE, TIMED URINE

General Information

Lab Order Codes: UALD

Synonyms: N/A

CPT Codes: 82088 – Aldosterone

82570 – Creatinine; other source

Test Includes: Urine aldosterone concentrations in µg/g creatinine and µg/24 hours, urine creatinine concentration in mg/kg body weight/24 hours. Note: Creatinine excretion is dependent on body size.

Logistics

Test Indications: When hyperaldosteronism is suspected, 24 hour urine for potassium provides a useful screening test following repletion of potassium and adequate intake.

Lab Testing Section: Urine/Stool - Sendouts

Referred to: Esoterix, Inc.(test #500018)

Phone Numbers:

Minneapolis: 612-813-6280

Saint Paul: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 3 - 8 days, test set up on Thursday

Special Instructions: Submit an entire 24-hour urine collection. No preservative. Refrigerate specimen during and after collection.

Note: Starting and ending times of collection are required for a timed urine collection and must be documented electronically or on the proper request form.

Specimen

Specimen Type:	Urine, timed collection
Container:	Plastic leakproof container (No preservative). Urine GUARD® collection container is preferred for a timed urine sample.
Draw Volume:	Submit an entire 24-hour urine collection
Processed Volume:	50 mL (Minimum: 5.0 mL) aliquot of a well mixed 24 hour urine
Collection:	For timed urine collections, empty the bladder, discard the voided sample, and note the start time. Collect all urine voided for the specified time period. At the end of the period, note the finishing time, add the last voided sample to the container by emptying the bladder. Bring the refrigerated container to the lab. Make sure all specimens submitted to the laboratory are properly labeled with the patient's name, medical record number and date of birth.
Special Processing:	Lab Staff: Add boric acid (0.5 g/100 mL) as preservative. Acidify urine to pH 4.0 with acetic acid. Do not use strong mineral acid. Indicate the 24-hour volume. Remove processed aliquot and freeze. Ship frozen. Forward promptly.
Patient Preparation:	Diuretics, antihypertensive drugs, cyclic progestogens, estrogens, and licorice should be terminated for at least 2 weeks and preferably 4 weeks prior to testing. Patient should be on a diet containing 135 mmol (3g) sodium/day for at least 2 weeks and preferably 30 days prior to testing. No recent radioactive scans. Potassium deficiencies should be corrected before specimen is collected.
Sample Rejection:	Unlabeled specimens

Interpretive

Reference Range:	**Ad Lib Sodium Intake**

Age	Aldosterone µg/24 hours	Aldosterone µg/g creatinine
Newborn:1-3 days	0.5 - 5	20 - 140
Prepubertal: 4-10 years:	1 - 8	4 - 22
Creatinine mg/kg body weight/24 hours:		
16 – 22 **Note:** Creatinine excretion is dependent on body size		

Critical Values: N/A

Limitations: Urinary aldosterone measurements alone are of very limited value in the diagnosis of hyperaldosteronism. Cushing's syndrome must be excluded with investigation for hyperaldosteronism.

Methodology: RIA after selective solvent extraction

Contraindications: N/A

References:

Esoteric, Inc. "Laboratory Services Test Directory" Web page www.esoterix.com

Esoteric, Inc. "Expected Value & S.I. Unit Conversion Table" Fifth Edition

Case Records of the Massachusetts General Hospital. Weekly Clinicopathological Exercises. Case 24-1992 (1992) A 52-Year-Old Man With Hypertension, Hypokalemia, and an Adrenal Mass, N Engl J Med 326(24):1617-23