Lab Dept: Urine/Stool

Test Name: CHLORIDE, 24 HOUR URINE

General Information

Lab Order Codes:	UCLQU
Synonyms:	Quantitative Urine Chloride; Chloride, 24 Hour Urine, Chloried, Time Urine
CPT Codes:	82436 – Chloride, urine 81050 – Volume measurement for timed colleciont, each
Test Includes:	Chloride concentration measured in mmol/L and mmol/24 hours

Logistics

Test Indications:	● Chloride is the major extracellular anion which is filtered from the plasma by the kidney glomeruli and is passively reabsorbed in the proximal tubules. ● Useful in the evaluation of kidney function. ● An indicator of fluid balance and acid-base homeostasis.
Lab Testing Sections:	Chemistry - Sendouts
Referred to:	Mayo Clinic Laboratories (Mayo test: CLU)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours
Turnaround Time:	1-2 days
Special Instructions:	Submit an entire 24-hour 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, 24 hour collection **Note: A 24 hour specimen is required.**

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:	4 mL (Minimum: 0.5 mL) from a well-mixed 24 hr 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: Measure total volume of specimen submitted and record the volume when decanting the specimen and creating an aliquot. Store and ship refrigerated.
Patient Preparation:	None
Sample Rejection:	Unlabeled or mislabeled specimen; collection <24 hours

Interpretive

Reference Range:

All ages:	40 – 224 mmol/24 hours

Interpretation: Urine sodium and chloride excretion are similar and, under steady-state conditions, both urinary sodium and chloride excretion reflect the intake of sodium chloride (NaCl). During states of extracellular volume depletion, low values indicate appropriate renal reabsorption of these ions, whereas elevated values indicate inappropriate excretion (renal washing). Urinary sodium and chloride excretion may be dissociated during metabolic alkalosis with volume depletion where urine sodium excretion may be high (due to renal excretion of NaHCO3), while urine chloride excretion remains appropriately low.

Limitations:	High urine values of other halide ions (eg, bromide, fluoride, iodide) may lead to falsely high readings on the chloride ion-selective electrode.
Methodology:	Potentiometric, Indirection-Selective Electrode (ISE)
References:	Mayo Clinic Laboratories October 2020
Updates:	10/12/2020: Test moved to Mayo Clinic Laboratories.