
Lab Dept: Urine/Stool

Test Name: HYPEROXALURIA PANEL, URINE

General Information

Lab Order Codes: UHPU

Synonyms: N/A

CPT Codes: 82542 – Column chromatography/mass spectrophotometry; non-drug analytes, not elsewhere specified, qualitative or quantitative, each specimen

Test Includes: Glycolate, glycorate, oxalate, and 4-Hydroxy-2-Oxoglutarate (HOG) levels reported in mg/g creatinine.

Logistics

Test Indications: Useful for distinguishing between primary and secondary hyperoxaluria; distinguishing between Type I and Type II primary hyperoxaluria.

Lab Testing Sections: Urine/Stool - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: HYOX)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: Varies, batched twice monthly

Special Instructions: See [Patient Preparation](#):

Specimen

Specimen Type: Urine, See [Patient Preparation](#):

Container: Plastic leak-proof urine container (no preservative)

Draw Volume: Entire Random urine collection

Processed Volume: 10 mL (Absolute minimum: 1.1 mL) random urine

Collection: Routine random urine collection

Special Processing:

Lab Staff: Remove urine aliquot from a well-mixed specimen. Place aliquot into a 10 mL urine tube. Freeze immediately. Store and ship at frozen temperatures. Forward promptly.

Patient Preparation:

Fasting overnight (12-14 hours, recommended). Have patient void the first-morning specimen, then collect specimen within 2 hours of the first-morning void while the patient continues to fast. Fluids are allowed.

Sample Rejection:

Specimens other than urine; mislabeled or unlabeled specimens

Interpretive**Reference Range:**

Analyte	Age	Range (mg/g creatinine)
Glycolate	0 – 1 month	0 - 60
	2 – 6 months	0 - 75
	7 – 12 months	0 - 75
	13 months – 6 years	0 - 75
	7 – 10 years	0 - 75
	>10 years	0 - 50
Glycerate	0 – 1 month	0 - 75
	2 – 6 months	0 - 125
	7 – 12 months	0 - 125
	13 months – 6 years	0 - 55
	7 – 10 years	0 - 55
	>10 years	0 - 25
Oxalate	0 – 1 month	0 - 400
	2 – 6 months	0 - 400
	7 – 12 months	0 - 300

	13 months – 6 years	0 - 150
	7 – 10 years	0 - 100
	>10 years	0 - 75
4-Hydroxy-2-Oxoglutarate (HOG)	0 – 1 month	0 – 15
	2 – 6 months	0 – 10
	7 – 12 months	0 – 5
	13 months – 6 years	0 – 5
	7 – 10 years	0 - 5
	>10 years	0 – 5
<p>Interpretation:</p> <p>Increased concentrations of oxalate and glycolate indicate Type I hyperoxaluria.</p> <p>Increased concentrations of oxalate and glycerate indicate Type II hyperoxaluria.</p> <p>Increased concentrations of oxalate with normal concentrations of glycolate and glycerate indicate secondary hyperoxaluria.</p>		

Critical Values:

N/A

Limitations:

Ascorbic acid will falsely elevate oxalic acid results.

Methodology:

Gas chromatography – Mass spectrometry (GC-MS)

References:

[Mayo Medical Laboratories](#) January 2016