Urine Porphyrins

** Indicates OVERALL toxic impact from BOTH metal AND chemical toxins (by detecting obstruction to the sensitive heme biosynthesis enzyme pathways).*

PORPHYRINS; URINE

DOCTOR'S DATA INC

LAB #:
PATIENT: Sample Patient
ID: PATIENT-S-0000
SEX: Male
AGE: 5

CLIENT #: 12345
DOCTOR:
Doctor's Data, Inc.
3755 Illinois Ave.
St. Charles, IL 60174

PORPHYRINS	RESULT nmol/g creat	REFERENCE RANGE	PERCENTILE (95th / 99th)	SPECIFIC INDICATIONS (if elevated):
Uroporphyrins	73	< 30		Arsenic, Chemicals?
Heptacarboxylporphyrins	0.7	< 6		
Hexacarboxylporphyrins	0.92	< 5.2		Chemicals?
Pentacarboxylporphyrins	2.5	< 4.5		
Coproporphyrin I	22	< 36		Arsenic?
Coproporphyrin III	110	< 105		Lead, Mercury?
Copro I/Copro III	0.2	< 0.8		Arsenic?
Total Porphyrins	230	< 160		Overall toxic suggestion (from ALL sources)
Precoproporphyrin I*	0.77	< 2		
Precoproporphyrin II*	0.15	< 1.2		
Precoproporphyrins III*	0	< 2		Mercury?
Total Precoproporhyrins*	0.92	< 5.2		
Precoproporphyrins*/Uro	0.013	< 0.25		

Urinary porphyrins are oxidized intermediate metabolites of heme biosynthesis and can serve as biomarkers of disorders in heme production. Abnormal porphyrin profiles have been associated with genetic disorders, poor nutritional status, oxidative stress, and high level exposure to toxic chemicals or toxic metals. The ratio of Precoproporphyrins-to-Uroporphyrins is reported to increase the sensitivity for detecting abnormalities in individuals with low heme biosynthesis. Alcohol, sedatives, analgesics, antibiotics estrogens and oral contraceptives can affect the levels of urinary porphyrins. Anemia, pregnancy, and liver disease can also affect porphyrin metabolism. The Urine Porphyrins test is best used in conjunction with urine toxic metals pre- and post-provocation testing.

Porphyrins Pattern Recognition Guide:

Mercury ↑ Penta, ↑ Copro III, ↑ Precopros, ↑ Precorpros : Uros

Arsenic ↑ Uros, ↑ Copro I : Copro III

Lead ↑ Copro III

Hexachlorobenzene, Dioxin ↑ Uros

Methylchloride, Polyvinylchloride, Polybrominated biphenyl ↑Copros

** Look for multiple indications for confirmation*

Hair or urine element testing suggested, to confirm specific toxic metal burdens

To confirm suspected toxic chemical exposure, use Urine Environmental Pollutants Panel (EPP) test.

CREATININE

	RESULT mg/dL	REFERENCE RANGE	PERCENTILE (2.5th / 16th / MEAN / 84th / 97.5th)
Creatinine	79	25 - 180	

SPECIMEN DATA

Comments:
Date Collected: 6/23/2009
Date Received: 6/29/2009
Date Completed: 7/8/2009
Method: HPLC
<dl: less than detection
Collection Period: Random
Volume:

*Precoproporphyrins are atypical porphyrins associated with high-level mercury exposure as described in Woods, J et al. J. Toxicol. Env. Hlth. 40,235-46(1993) and Morita, Y et al. Porphyrins 14,93-7(2005). Precoproporphyrins are intended for Research Use Only. Not for use in diagnostic procedures.

Porphyrins can help focus overall toxic assessment and indicate vitamin B6 and Zinc Cofactor needs (as porphyrins are made of pyroles) as well as toxin avoidance strategies and detoxification support.