Fecal Toxic Metals Analysis

** One of the primary uses of the faecal metals test is for the assessment of what 'background' Mercury burden is attributable to amalgam dental fillings in the mouth. (Traces are excreted via stool).*
Hence the varying reference ranges (depending on if amalgams are present or not).

LAB #: F000000-0000-0
PATIENT: Sample Patient
ID: PATIENT-S-00003
SEX: Male
AGE: 7

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

Toxic Metals; Feces

TOXIC METALS		RESULT mg/kg Dry Wt	REFERENCE INTERVAL	PERCENTILE (68TH / 95th)
Mercury	(Hg)	0.031	<.05 w/o amalgams*	
Mercury	(Hg)	0.031	<0.5 with amalgams*	
Antimony	(Sb)	0.100	< 0.080	
Arsenic	(As)	0.20	< 0.30	
Beryllium	(Be)	< dl	< 0.009	
Bismuth	(Bi)	229.8	< 0.050	
Cadmium	(Cd)	0.41	< 0.50	
Copper	(Cu)	63	< 60	
Lead	(Pb)	0.27	< 0.50	
Nickel	(Ni)	11.8	< 8.0	
Platinum	(Pt)	< dl	< 0.003	
Thallium	(Tl)	0.019	< 0.020	
Tungsten	(W)	0.054	< 0.090	
Uranium	(U)	0.085	< 0.120	

WATER CONTENT	RESULT % H_2O	REFERENCE INTERVAL	MEAN 72.5% (-2SD -1SD +1SD +2SD)
% Water Content	67.6	60 - 85%	

INFORMATION

Analysis of elements in feces provides a comprehensive evaluation of environmental exposure, accumulation and endogenous detoxification of potentially toxic metals. For several toxic elements such as mercury, cadmium, lead, antimony and uranium, biliary excretion of metals into feces is the primary natural route of elimination from the body. Studies performed at DDI demonstrate that the fecal mercury content and number of amalgam surfaces are highly correlated, as is the case for post-DMPS urine mercury levels and amalgam surface area.

Results are reported as mg/kg dry weight of feces to eliminate the influence of variability in water content of fecal specimens. The reference values that appear in this report have been derived from both published data and in-house studies at DDI. *Due to exposure to mercury in the oral cavity, people with dental amalgams typically have a considerably higher level of mercury in the feces than individuals without dental amalgams; therefore, two reference ranges have been established for mercury.

To provide guidance in interpretation of results, patient values are plotted graphically with respect to percentile distribution of the population base. Since this test reflects both biliary excretion and exposure (metals to which the patient is exposed may not be absorbed), it may not correlate with overt clinical effects. Further testing can assist in determining whether the metals are from endogenous (biliary excretion) or exogenous (oral exposure) sources.

1. Bjorkman, L, Sandborgh-Englund, G, and Ekstand, J,. Mercury in Saliva and Feces after Removal of Amalgam Fillings. Toxicology & Applied Pharmacology 144: 156-162 (1997)
2. Zalups, R, Progressive Losses of Renal Mass and the Renal and Hepatic Disposition of Administered Inorganic Mercury. Toxicology & Applied Pharmacology 130: 121-131 (1995)
3. Adamsson, E., Piscator, M., and Nogawa, K., Pulmonary and Gastrointestinal Exposure to Cadmium Oxide Dust in a Battery Factory. Environmental Health Perspectives, 28: 219-222 (1979)
4. Smith,J., et al., The Kinetics of Intravenously Administered Methyl Mercury in Man. Toxicology & Applied Pharmacology 128:251-256 (1994)
5. Bass, D., et al., "Measurement of Mercury in Feces", Poster presentation 1999 AACC

SPECIMEN DATA

Comments:

Date Collected: 11/28/2011
Date Received: 12/1/2011
Date Completed: 12/8/2011

Provocation:
Detoxification Agent:
Dosage:

Dental Amalgams: not indicated
Quantity:
Methodology: ICP-MS

V08.10

** Secondary uses can include the assessment of DIETARY toxic metal load from a suspect food/ meal (e.g. seafood) and even some medications/ supplements. (Most useful for assessing a meal that is regularly consumed & requires consideration of current digestive transit time for the timing of stool sampling).*