

Replacement of Plasma Arginine Vasopressin Testing with Plasma Copeptin

Date Effective: April 8, 2019

Background Information:

- Copeptin is a surrogate marker for arginine vasopressin (antidiuretic hormone) and has a similar half-life.
- Arginine vasopressin assays have been technically difficult, subject to specimen degradation and are not readily available.
- Plasma copeptin specimens are very stable and are easy to measure by fluorescent immunoassay.
- Copeptin testing has now replaced AVP for the differential diagnosis of central or nephrogenic diabetes insipidus.
- AVP testing is no longer provided by reference labs.

Change in or New Test Procedure:

- Effective April 1, 2019, Shared Health laboratories will no longer provide arginine vasopressin testing.
- Plasma copeptin should be ordered instead of AVP.
- Any AVP requests received by the laboratory will be changed to copeptin.
- Specimens will be referred to In-Common laboratories for analysis.

Patient Impact:

- Improved quality of test results.

References:

- A Copeptin-Based Approach in the Diagnosis of Diabetes Insipidus. N Engl J Med 2018, 379(5): 428 - 439
- Diagnostic Accuracy of Copeptin in the Differential Diagnosis of the Polyuria-polydipsia Syndrome: A Prospective Multicentre Study. J Clin Endocrinol Metab 2015, 100(6): 2268 - 2274
- Correlation of Plasma Copeptin and Vasopressin Concentrations in Hypo-, Iso-, and Hyperosmolar States. J Clin Endocrinol Metab 2011, 96(4): 1046 - 1052

Contact Information:

AbdulRazaq Sokoro, PhD, FCACB, FACB, Clinical Biochemist
Email: asokoro@pmh-mb.ca Tel: 204-578-2187

William Dent, MSc, Clinical Biochemist
Email: bdent@sharedhealthmb.ca Tel: 204-787-7004