Capital Health

URGENT
MEMORANDUM
October 8, 2013

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To: Capital Health Clinics and Physicians
Nova Scotia District Laboratories

From: Dr. Manal Elnenaei, Dr. Amy Lou, Dr. Bassam A Nassar, Dr. Irene Sadek, Ms. Shauna Thompson, Divisions of Clinical Chemistry and Hematopathology

Subject: **Folate Reagent Shortage**

We have been informed by our Vendor that reagents for folate testing will be unavailable until the end of October 2013. Hence, all samples that have been received for serum or red blood cell (RBC) folate testing since September 17 will be referred out to Hospitals in Common Laboratories in Ontario (HICL). Importantly, in the meantime, we kindly urge you to limit folate requesting particularly during this period and restrict it to patients who are deemed to be in absolute need for testing. We would like to take this opportunity to highlight that folate testing in general, has been substantially overused over the past few years with only 2.6% of approximately 68,000 samples we analyze annually showing deficiency.

Since all grains, flours and breakfast cereals are now enriched with folic acid, folic acid deficiency is now rare (less than 1% in Canada). Patients most at risk of being folate deficient are:

- Infants with prolonged diarrhea and vomiting before starting to take folic acid-fortified food or those with an inborn error of folate metabolism
- Patients with severe malabsorption, severely malnourished alcoholics and those on prolonged tube feeding or total parenteral nutrition without folic acid supplementation
- Certain patients with malignancy and those on medications affecting folate metabolism e.g. Methotrexate
- Pregnant females not on folate supplements

In most cases, it is more practical and economical to treat with folic acid, than to test for deficiency. Therefore, with better understanding of the clinical rationality of the folate testing, all physicians are strongly encouraged to limit its request.

Recommendations for Folate Testing in CDHA Clinical Chemistry Laboratory

1. Folate should only be tested in patients with unexplained macrocytic anemia and related manifestations, unexplained peripheral neuropathy or any of the above conditions.
2. RBC folate should only be requested when patients are strongly suspected to be folate deficient clinically and when the previous fasting serum folate result is in the range of 12-16 nmol/L, i.e. borderline normal.
3. First line testing for folate deficiency in these patients should be serum folate and not RBC folate.
4. Since serum folate is affected by recent food intake thus producing falsely elevated results, patients should be fasting for at least 8 hours prior to sampling.
5. Ongoing monitoring of patients on folate therapy is generally unnecessary unless non-compliance is suspected.

Please contact Dr. M. Elnenaei at 902-473-5194 or Dr. A. Lou at 902-473-1528 if you have further questions about this matter.

C. Ms. Fran O'Brien, Dr. J. Godfrey Heathcote, Ms. Sandy Schlay, Ms. Faye Lively