Clinical Laboratory Update

Warning: Biotin Supplements Affect Test Results

Inaccurate results are anticipated for the following tests when there is excessive biotin in a sample tested at UCH:

- Cancer Antigen 19-9
- Hepatitis A Antibody
- Hepatitis A Antibody IgM
- Hepatitis B Core IgM Antibodies
- Hepatitis B Surface Antigen
- Testosterone
- Thyroglobulin
- Thyroglobulin Antibody
- Troponin I

Background: Biotin deficiency is a very rare condition, but taking large doses of over-the-counter biotin supplements has become popular. This can interfere with immunoassay results. The magnitude and duration of the interference is inconsistent and may depend on the dose. However, the risk of interference may be reduced if one abstains from biotin supplementation for at least eight hours before a sample is collected, which is often consistent with not taking one’s daily supplement before a sample is collected later that day.

Clinicians who encounter unexpected results that are inconsistent with their patient’s clinical presentation should examine their patient’s supplements; because, even if asked directly whether they are taking biotin, patients may answer incorrectly as it is marketed under various names (e.g. vitamin H, coenzyme R).

Please call Gregary Bocsi, DO at 720-848-7050 if you have any questions or visit our website at https://www.uchealth.org/professionals/uch-clinical-laboratory/ for additional information.

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