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Inside This Issue

DISCONTINUATION OF CLINITEST, ICTOTEST, AND ACETEST

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Effective January 2, 2014, Clinitest and Ictotest will be discontinued throughout the Marshfield Clinic laboratories system and Acetest will be discontinued at Marshfield Center only. These tests are no longer supported by the vendor due to the unavailability of reagents.

TEST INFORMATION

Clinitest

Test Code: None

Clinitest (reagent tablet) is a semi-quantitative test used for the determination of total reducing substances in urine, which include glucose, galactose, lactose, and pentose. Clinitest has mainly been utilized for those pediatric populations in whom non-glucose reducing substances are present as a result of an inherited metabolic disorder for carbohydrates. Clinitest has poor specificity and suggests the presence of non-glucose sugar; it is not a confirmatory test.

Newborn screening is now a standard and mandatory practice for common genetic defects and includes screening for common inherited metabolic disorder for carbohydrates. The clinical utility and necessity of the Clinitest is therefore eliminated.

continued on page 2

Ictotest

Test Code: None

Ictotest is a qualitative test used to detect the presence of conjugated bilirubin in urine. It uses the same chemical reaction as the bilirubin pad on the multi-reagent dipstick, but is presented in a tablet format. The main advantage for this test has been that color reaction is less affected by the inherent color of the urine itself. It has therefore been used in confirming or refuting apparently positive reactions on the dipstick in cases where the urine sample is deeply colored.

The presence of bilirubin in serum or urine is an early indicator of liver dysfunction and of intrinsic or extrinsic biliary obstruction. Serum total bilirubin and direct bilirubin are the current methods of choice to determine the presence of bilirubin and are the first line tests when evaluating liver dysfunction.

Acetest

Test Code: ACET

The Acetest (reagent tablet) is a semi-quantitative test, which utilizes nitroprusside and glycine to test for the ketone bodies acetoacetic acid and acetone. Acetest reagent tablets primarily react with acetoacetic acid; acetone has only a 20% reactivity compared with acetoacetate, while beta-hydroxybutyric acid does not react at all in this reaction. Thus, this method always underestimates the total load of excreted ketone bodies.

Ketones are commonly monitored in conditions associated with decreased availability of carbohydrates (starvation or frequent vomiting) or decreased use of carbohydrates (diabetes mellitus, glycogen storage disease, and alkalosis), and for patients on ketogenic diet for the management of refractory epilepsy.

Evaluation of ketosis warrants use of quantitative tests such as measurement of beta-hydroxybutyrate which is the method of choice.

Clinical and Laboratory Standards Institute (CLSI) recommends that,

> "Confirmatory chemical urinalysis tests detect the same substance with the same or greater sensitivity and/or specificity. Repeating a reagent strip reaction or analysis is not a confirmatory test. Many of the historical confirmatory chemical urinalysis tests such as sulfosalicylic acid (SSA) test for protein and the tablet test for bilirubin etc., may not be relevant to current laboratory practice." (Urinalysis; Approved Guideline—Third Edition GP16-A3)

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