

P110. HEMOLYSIS INTERFERENCE ON ETHANOL ASSAY

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In this study, it was aimed that evaluate the hemolysis effect on ethanol assay.

In this study, about 10 and 40 mg/dL concentration ethanol containing samples was prepared with ethanol calibrator (92.7 mg/dL) and evaluated the effect of hemolysis. For providing similar matrix, 10 ethanol-free normal patients' serums were pooled and used for dilutions. Hemoglobin was isolated from fresh blood. Evaluation was performed in 5 levels of hemolysis (about 0, 250, 500, 750, 1000 mg/dL).

It has been shown to vary that about 10 mg/dL ethanol at 5 hemolysis levels 10.3, 10.5, 12.3, 14, 16.6 respectively. (According to the first reading percent differences are 1.84, 19.42, 35.92, 61,17 respectively). It has been shown to vary that about 10 mg/dL ethanol at 5 hemolysis levels 41.6, 41.6, 41.2, 43.9, 44.8 respectively (according to the first reading percent differences are 0, -0,96, 5.53, 7.69 respectively).

Most of the methods currently on the market use the same enzymatic reaction (alcohol dehydrogenase). Therefore, a similar interference may occur in devices from other brands. High rate of interference, especially in low level of ethanol, may be associated with the analytical sensitivity.

Hemolysis samples should be carefully considered to not experience legal troubles.

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