

Abstract

Research Title : Blood glucose level of plasma samples prepared from NaF and lithium heparin anticoagulants for diabetes mellitus diagnosis

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Aim of this study was compared blood glucose levels, which prepared from NaF and lithium heparin anticoagulants for diabetes mellitus (DM) screening test. DM-checkup clinic, Kudjup hospital, Udonthani province was collected blood samples and filled to NaF and lithium heparin tubes (Greiner Bio-One, Austria) from 300 customers. Then, plasma was separated immediately from each blood sample tube by centrifuged and analyzed for blood glucose level by automatic analyzer, Accurizerautochem 400 (Affinitech, China). Four groups of samples, which were divided according by American Diabetes Association, were all sample group, normal group, prediabetic group and diabetic group. The result was presented blood glucose levels of NaF plasma and lithium heparinized plasma in normal and prediabetic groups, which were significantly corresponded ($p < 0.05$). It may implied that lithium heparin tube can be use replace NaF tube and was not affect to DM diagnosis when immediately analyzed blood glucose level. In addition, lithium heparin tube can be collect blood sample for other biochemical tests. May reduce tune around time, cost, and mistake from sample overload, and also labor spending of laboratory staffs.

Keyword: diabetes mellitus (DM), blood glucose, fasting blood sugar (FBS), NaF, lithium heparin