Long Term Follow Up of the Utility of Troponin T to Assess Cardiac Risk in Stable Chronic Hemodialysis Patients

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SUMMARY

Thirty long-term, stable hemodialysis patients were followed 24 months to identify any predictable relationship between elevated serum cTnT values and the diagnosis of coronary artery disease and/or the occurrence of a cardiac death. Patients with a baseline cTnT value of >0.1 µg/L were at high risk for life-threatening cardiac events during the 2 years follow-up. With regard to predicting a cardiac event, cTnT has a specificity of 93.75% and sensitivity of 81.8% compared to cTnI whose specificity was 87.5% but sensitivity of between 9.1 and 18.2%. CK-MB was the most specific at 100% but had a low sensitivity of 9.1%. The hemodialysis process, while causing an increase in the serum levels of all the markers studied except CK, the increase only proved significant for cTnT. The only markers whose stratification remained consistent over the 2 years where cTnT and CK-MB, for all others a gain or lose was registered. Baseline stratification using cTnT with a cut-off value of >0.1 µg/L offers opportunities to select at risk hemodialysis patients for corrective cardiovascular intervention. (Clin. Lab. 2000;46:469-476)