

Troponin I in asymptomatic haemodialysis patients in end stage renal disease versus controls: Troponins I are not falsely positive

Dr sanae ezzaki¹, Dr imane failal¹, Pr n. mtioui¹, Pr s. elkhayat¹, Pr m. zamed¹, Pr g. medkouri¹, Pr m. benganem¹, Pr b. ramdani¹

¹*Nephrology, CASABLANCA, Morocco*

Introduction:

Patients with end-stage renal disease (ESD) in haemodialysis (HD) have an increased incidence of coronary artery disease. The specificity of cardiac troponin I (cTnI) in these patients is controversial, and varies according to the studies and / or the assay method used. Our objective is to study the prevalence of high levels of cTnI in asymptomatic patients with ESD.

Patients and Methods: This is a prospective study that included 37 asymptomatic haemodialysis patients from the department of nephrology-haemodialysis of the University Hospital of Casablanca. Patients with a history of cardiovascular or ischemic disease, severe anemia or recent infection have been excluded. The samples were made before the HD session for the first group. The cTnI assay was performed using an enzyme immunoassay method using ST AIA-PACK cTnI 3rd GEN reagent on AIA 360 (cut off: 0.04ng / ml).

Results: The mean age of the patients was 40 years, with a slight male predominance (20H / 17F). The average HD duration was 16 years. None of the patients or controls had a cTnI level of > 0.04ng/mL.

Conclusion: According to our results, ESD and HD did not interfere with the cTnI assay. Several other studies have confirmed the specificity of cTnI in the diagnosis of coronary insufficiency. The main reason for the controversy is the lack of standardization of the reference values for the different assay methods. Also, it should be noted that most studies report an elevation of troponin T in ESD, which can be confusing for some clinicians