

Troponinemia: An Area That Still Needs to Be Explored



The research article by D'Souza et al,¹ "Diagnosis of unstable angina pectoris has declined markedly with the advent of more sensitive troponin assays," published in the August 2015 issue of *The American Journal of Medicine* is well supported by other clinical research evidence. I would like to add a few interesting pieces of information and get some clarification, which could add more weight to similar studies in the future.

One of the things I observed in the study design illustrating inclusion and exclusion criteria is the exclusion of 1089 patients with cTnI elevation of >30 ng/L. We could get more clarification from the authors about this patient population; but I like to theoretically contemplate that this patient population could have demand ischemia in the setting of sepsis or heart failure or any kind of shock or renal failure. This scenario is commonly encountered, especially in critical care settings when the presentation is equivocal; it is natural for emergency department physicians or critical care physicians to investigate for cardiac causes using troponin. I believe there are a lot of unanswered questions and unclear guidelines with regard to the diagnosis of demand ischemia. The authors have included 115 type 2

myocardial infarction patients in the non-ST elevation myocardial infarction (NSTEMI) group of 346 patients. It would be more interesting to learn why they were included in the study, given that they constitute nearly 33% of total NSTEMI patients. The fact that only 28% had intervention could be due to the above population.

With regard to increased 30-day mortality among NSTEMI patients of 27%, compared with 14% in STEMI patients: this is probably due to the difference in prevalence of comorbidities, as well as the difference in percentage of percutaneous coronary intervention. This study may indirectly support the evidence that early percutaneous coronary intervention in NSTEMI patients reduces mortality in the long term.^{2,3}

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