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**Poster Title: HIGHER PREVALENCE OF UNSTABLE ANGINA COMPARED TO NON-ST ELEVATION MI IN WOMEN IS IN PART EXPLAINED BY SMALLER MI SIZE**

**Authors:** Sarah E. Joyner, Michael C. Kontos, F. Philip Anderson, James L. Tatum, Joseph P. Ornato, Robert L. Jesse

**Departments:** Internal Medicine Division of Cardiology, Pathology, Radiology, Emergency Medicine

**Background:** Prior studies that have included patients (pts) with non-ST elevation myocardial infarction (NSTEMI) and unstable angina (UA) have reported a higher prevalence of UA rather than NSTEMI in women (W) compared to men (M). An important limitation of most prior studies was using CK or CK-MB to define MI. However, using the more sensitive cardiac marker troponin (TnI) is now recommended for diagnosing MI. We hypothesized that the higher prevalence of UA is in part due to smaller MIs in women than men, and therefore are less likely to meet traditional criteria for MI based on CK or CK-MB.

**Methods:** Pts admitted for possible MI were admitted to the CCU and undergo serial sampling of myocardial markers which include CK, CK-MB and TnI at 0 and 8 hours, with further sampling until markers peaked in those with elevations. Pts were separated into categories based on peak CK (upper limit of normal 200 U/L) and CK-MB (8 ng/ml).

**Results:** Over a 6 year period, a total of 1286 consecutive pts were diagnosed with NSTEMI (676 men [53 %], 610 women [47%]). Peak CK (median 290 U/L vs 195 U/L) and CK-MB (median 53 ng/ml vs 34 ng/ml) were higher for men compared to women. Using an elevated CK-MB rather than TnI to define MI, 44% of women compared to 36% of men (p=0.006) had small MIs and were diagnosed by TnI only, and thus would not have met traditional CK-MB criteria for MI (table). When an elevated CK was used to define MI, the differences were even greater; only 1/3 of men had small MIs; in contrast, 1/2 of women would have been considered to have UA rather than MI.

**Conclusions:** Women have smaller MIs compared to men. The use of less sensitive cardiac markers in prior studies likely contributed to the higher prevalence of UA found in women.