

Sex and age differences in patients with acute coronary syndrome and non-obstructive coronary arteries: presentation and outcome

M.G.L. Williams¹, A. Dastidar¹, K. Liang¹, T.W. Johnson¹, A. Baritussio¹, J.W. Strange¹, N. Joshi¹, S. Dorman¹, E. De Garate¹, L. Spagnoli¹, E. Fiori¹, C.B. Lawton¹, G. Biglino², S. Plein³, C. Bucciarelli-Ducci¹

¹Bristol Heart Institute, Cardiology, Bristol, United Kingdom; ²University of Bristol, Bristol, United Kingdom; ³University of Leeds, Department of Biomedical Imaging Science, Leeds, United Kingdom

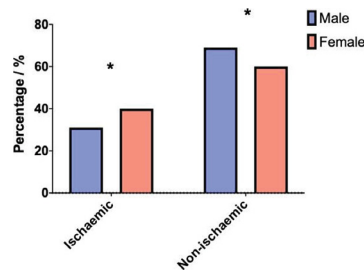
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Aims: A substantial number of patients present with acute coronary syndrome (ACS) and non-obstructive coronary arteries. Sex and age differences in these patients are not well understood. This study aims to evaluate the impact of sex and age on clinical presentation and outcome in patients with ACS and non-obstructive coronary arteries, with either an ischaemic or non-ischaemic cause.

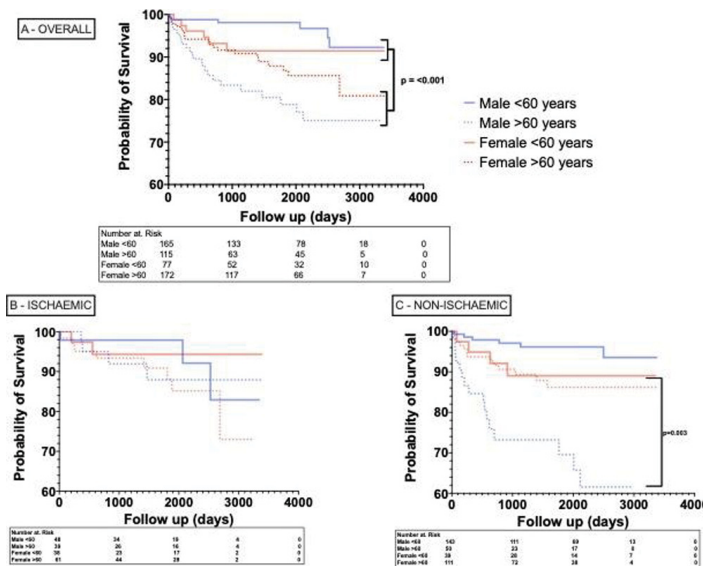
Methods and results: Consecutive patients with an ACS and non-obstructive coronary arteries (n=719) from a single tertiary centre underwent comprehensive cardiovascular magnetic resonance (CMR) imaging with late gadolinium enhancement (LGE). The primary endpoint was all-cause mortality. CMR was performed at a median time of 30 days after presentation and identified a diagnosis in 74% of patients. Patients with

an ischaemic or non-ischaemic aetiology (n=529) on CMR were followed prospectively. All-cause mortality was 11% over a median follow up of 4.9 years, with no significant difference between sexes (11% versus 11% p=0.732). Women were more likely to have an ischaemic aetiology on CMR (40% v 31%, p=0.037). Age group (HR 1.48, p=0.002), log peak troponin (HR 0.78, p=0.033) and LVEF (HR 0.98, p=0.032) were independent predictors of mortality. Men aged >60 years with a non-ischaemic aetiology on their CMR were at higher risk of death than women >60 years (p=0.003).

Conclusions: There is no difference in all-cause mortality between sexes in patients presenting with ACS and non-obstructive coronary arteries but increasing age is an important predictor of mortality in both sexes.



Sex differences in CMR diagnosis



Sex, age and mortality