Abstract: P1018

10 year experience of Takotsubo Syndrome

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Background
Takotsubo syndrome (TTS) is the final diagnosis in up to 6% of patients presenting with ST elevation myocardial infarction. A recent International Expert Consensus Document published in the European Heart Journal 2018 suggested standards for the diagnosis and treatment of TTS.

Purpose
To review the diagnosis and treatment of TTS in a UK tertiary cardiology center from 2008 onward and compare this with the new Expert Consensus recommendations.

Methods
A retrospective audit of patients acutely admitted to our institution from 2008 coded with a diagnosis of cardiomyopathy. Patients with hypertrophic cardiomyopathy and dilated cardiomyopathy were excluded. 116 patients in this time period were coded with a discharge diagnosis of "cardiomyopathy-other". These notes were reviewed and patients were identified with confirmed discharge diagnosis of TTS.

Results
42 patients were diagnosed with TTS in the study period. All these had a documented ECG, troponin and assessment of left ventricular structure and function. 39/42 (93%) were female. 21/42 (50%) presented with ST elevation; QTc prolongation was noted on 19% of ECGs at presentation. Mean troponin was 642ng/L with a range of 9-1917ng/L. Coronary angiography was carried out acutely in 93% of cases. Left ventricular function was assessed by echo (93%) or cardiac MRI (57%) in all cases; 71% having significantly impaired LV systolic function. Apical ballooning was seen in 56%. 75% had myocardial oedema on MRI.

88% of TTS patients were discharged on an ACEi, 76% on a beta blocker, 60% on aspirin, 19% on dual antiplatelet therapy, 21% on diuretics and 29% on nitrates. No patients received levosimendan.

An emotional trigger was documented in 17% and a physical trigger in 93%. One patient had a prior psychiatric disorder and six a prior neurological disorder.

The interTAK score was calculated retrospectively and was >70 points in 3/42 (7%). All these had ST elevation on presentation ECG.

Conclusions
In the 10 years leading up to publication of the first Expert Consensus recommendations for the diagnosis and treatment of TTS, the vast majority of cases of TTS underwent urgent coronary angiography as well as having ECG, troponin and cardiac function recorded. Half had a typical pattern of apical ballooning and three quarters had evidence on myocardial oedema. A physical trigger was much more common than an emotional trigger. Use of the interTAK score would not have altered the management of this cohort as none of those admitted with a possible non-ST elevation ACS had an interTAK score >70. The current recommendations suggest not to
routinely prescribe beta blocker therapy on discharge whereas in our historic cohort these were prescribed on discharge frequently.