A952 - Takotsubo syndrome in critically ill patients

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Introduction:
Takotsubo syndrome (TS) is known to be an acute transient cardiac condition accompanied with acute heart failure. TS is often triggered by critical illness but that has been rarely studied in ICU practice. Therefore, it is known, that the use of catecholamines can directly induce TS, worsen LVOT obstruction, and delay spontaneous recovery in TS patients, it is nearly impossible to avoid their administration in critically ill [1].

Methods:
We have analyzed medical records from 23 patients with TS, that were revealed during year 2017 in our hospital. TS was defined due to Mayo criteria, including transient regional wall motion abnormalities, mildly elevated troponin level and no signs of obstructive CAD on coronary angiography.

Results:
Out of 23 patients who developed TS in ICU or ICCU, hemodynamic instability occurred in acute phase of TS in 12 (52%) cases. 9 (39%) of patients were admitted to ICU in due to septic shock (2 patients), major bleeding (1), cerebral mass lesion (1) and ARDS (2) and required treatment with catecholamines. General mortality rate in TS patients was 7 (30%), and 5 (55%) in critically ill TS patients. Mean duration of noradrenalin infusion was 7.2 days, dobutamine infusion 4.3 days. Patients with TS needed more ICU resources and longer ICU stay. Mortality rate was higher in TS patients (55%) vs the ICU-population (28%), p = 0.02.

Conclusion:
TS seems to be an often cause of LV dysfunction and acute heart failure in critically ill. It seems that TS could be a predictor of worse prognosis in critically ill patients. Although catecholamine administration may worsen the patient prognosis and induce further AHF in critically ill patients it rearely can be avoided.

References: