Clinical Presentation of Stress Related Acute Heart Conditions Depends on Cardiac Background and Patients' Demographics

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Background: Apical ballooning syndrome (ABS), ACS and life-threatening situations such as arrhythmias (VT, VF) or pulmonary edema (PE) could be triggered by stress.
Aim: To evaluate the influence of cardiac backgrounds and patients' demographics on manifestation of acute heart conditions related to stress.
Methods: Clinical manifestation, ECHO, angiographic data and long term MACE were evaluated in 17 patients who developed heart disease triggered by stress.
Results: All patients were divided into 3 groups. STEMI group included 8 patients with typical clinical and ECG criteria and documented coronary lesions. ABS group included 6 patients with a reversible course of apical CMO and open coronaries. A third group included 3 patients requiring critical care due to fulminate pulmonary edema and/or recurrent VT.

	ABS	STEMI	Critical situations
Trigger	Emotional stress during 5 days before admission		
N	6	8	3
Gender	F only	M only	F only
Age	45 – 65	48 – 66	68 - 76
Previous history	Apical ballooning (n=1)	IHD + PCI (n=1)	IHD after MI (n=1) MR (n=1) Long term HTN (n=1)
Previous information about LV function (ECHO)	Normal (n=1)	Normal (n=2)	Decreased LV function (n=3) Significant MR (n=2)
Clinical presentation	Apical ballooning sm (n=6)	Ant wall MI (n= 5) Inf wall MI (n=3)	Pulm. edema (n=2) VT storm (n=2)
Angiography	Normal coronaries (n=6)	Culprit lesion: LAD (n=5), RCA (n=2), CX (n=1)	TVD (n=2), Not performed (n=1)
Treatment	Medication	Medication Coronary Stenting (n=8)	Medication Revascularization (n=1), AICD (n=1)
Follow up (months)	8(4 – 19)	9 (3 – 14)	5 - 13
Hospitalizations	0	1	2
Interventions	0	0	0
Mortality	0	0	1

Conclusion: Patients' demographics and cardiac backgrounds are significant factors influencing the clinical form of heart disease triggered by stress.