Fishing Pot For Trapping Octopus- Acute Emotional Distress: An Under-Recognized Manifestation With Morbid Consequences/Outcomes

Suneeta Kumari, MD, MPH, Saba Afzal, MD, Zain Memon, MD, Stacy Doumas, MD, Ramon Solhkhah, MD

Learning Objectives:
To understand manifestations, risk factors and pathogenesis of Takotsubo cardiomyopathy (TCM)-Broken Heart Syndrome.

Case Summary:
The patient is 58-year-old Caucasian female, married with no prior psychiatric history and no significant medical comorbidities presented in office for psychiatric evaluation requesting medication for symptoms of anxiety and depression. During evaluation patient shared her recent history of hospitalization triggered by an emotionally distressing experience at work where she was yelled at by her supervisor on a trivial issue. Patient reportedly left her work in despair and anguish, crying but while driving back home when she realized that she had a difficult time focusing while driving and developed palpitations accompanied with chest pain and diaphoresis compelling her to divert to a hospital ER. Patient underwent a comprehensive evaluation which showed small ST- segment elevation (about 1 mm)/ changes in V1-V3 and biphasic T wave changes in V1-V4 with sinus rhythm in her 12 lead EKG. Patient was also noted to have elevated cardiac enzymes and therefore was admitted for further cardiac diagnostic work up and management. During her hospitalization patient underwent echocardiography which revealed left ventricular systolic dysfunction with marked regional wall motion abnormalities, but no coronary disease was found on cardiac catheterization. Reviewing of cardiologist record revealed no evidence of MI. Patient was diagnosed with Takotsubo cardiomyopathy(TCM) during her hospitalization. TCM, also known as apical ballooning syndrome, and broken heart syndrome, is associated with emotional and physical stress. Pathogenesis: To date, the exact mechanism of TCM is unknown. The trigger is an intense emotional or physical stress such as catastrophic news, death of a relative, arguments, natural disasters (including Tsunamis), war, or even surgery can precipitate TCM.

Conclusions:
TCM is a reversible cardiomyopathy with a generally positive and favorable outcome in most of the patients. Previous research indicates various mechanisms that potentially contribute to the TCM pathogenesis, but the exact mechanism is still not known. Regardless of the underlying cause, patients with the TCM deserve special attention because this extensive distribution of wall motion abnormalities leads to potential complications, including pulmonary edema, hypotension, and heart failure. Although the main stay of management in patients with TCM is supportive. There is no consensus on pharmacological management of TCM due to the rarity of this condition. Conservative treatment frequently leads to rapid resolution of symptoms. There is a need of additional research/ RCTs and development of national registry to better understands TCM prognosis, role of estrogen, and relaxation therapies in the management of TCM. Although TCM is a rare condition, psychiatrist seldom see patients with broken heart syndrome in clinical settings, but it should be on high index of suspicion for correct diagnosis. Early recognition and treatment are the key to successfully treat this condition and to avoid expensive procedures and imaging studies.