“DON’T GO BREAKING MY HEART” - A CASE OF TAKOTSUBO CARDIOMIOPATHY

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BACKGROUND

There is a well known link between emotional disturbances and cardiovascular diseases and Takotsubo Cardiomyopathy (TTC) reflects this interaction very accurately. Also known as stress cardiomyopathy, it affects mostly post-menopausal women who manifest symptoms mimicking an acute coronary syndrome (ACS), usually precipitated by an emotional stressor. (1-4)

CASE REPORT

A 75-year-old woman was sent to our psychiatry outpatient clinic complaining of anxiety.

In the past year, she had been admitted twice in the cardiology ward for suspected ACS after engaging in sexual activity. In the first episode, she had typical retrosternal chest pain, dyspnea and profuse sweating. In the second one, she had intense dyspnea, being first treated for acute pulmonary edema in the Emergency Room. In both occasions, EKG showed anterior left bundle block with no ST-T segment abnormality. Her laboratory tests showed a discrete elevation of cardiac enzymes. The cardiac catheterization was subsequently performed, showing apical ballooning and an ejection fraction in the lower limit of normality. No evidence of coronary obstruction was found. After 2 days, all the clinical and physical findings remitted completely, leaving the clinical impression of TTC.

Our patient was an autonomous and physically active woman, with no trigger for TTC other than sexual intercourse with her husband. She described their marital relationship as satisfactory. However, she claimed a lack of interest and a general inability to find pleasure in sexual activity, with no physical or emotional satisfaction.

She had history of anxious syndrome with hypochondriacal fears after an allergic reaction to penicillin, occurring 40 years prior. By that time, she was medicated by a psychiatrist with paroxetine 10 mg id.

She presented multiple cardiovascular risk factors (Diabetes mellitus type 2, hypertension and dyslipidemia), chronic obstructive pulmonary disease and obstructive sleep apnea syndrome.

The SSRI was switched to sertraline 50 mg. At the follow up appointments with the cardiologist and psychiatrist she remained asymptomatic.

LITERATURE REVIEW

TTC is a cardiac syndrome defined by a transient left ventricular dysfunction resembling an ACS. TTC was first recognized in Japan in 1990 and it was named after the traditional pots that the Japanese fishermen used to catch octopus given its resemblance with the ventricular shape in imaging studies. (1,2)

Current research shows that TTC accounts for 1,7 to 2,2% of hospitalizations due to suspected ACS. This syndrome affects mainly post-menopausal women in their seventh decade (90%). (1)

The typical clinical presentation is characterized by chest pain and dyspnea. Common EKG abnormalities include ST-segment elevation associated with increased plasma levels of cardiac enzymes consistent with myocardial infarction. However, when the patient undergoes invasive procedures such angiography left ventricular ballooning is present and there is no significant coronary lesions.

While the pathophysiology of TTC remains elusive, the overactivation of sympathetic system and increasing circulating catecholamines are suggested as the most probable explanation. (1-4)

CONCLUSIONS

This case draws attention to the brain-heart connection in TTC and the importance of recognizing psychological stressors for physical symptoms. Emotional stressors may trigger a catecholamine response in susceptible people making them more prone to manifest their affective symptoms through somatic manifestations such TTC. (3,4)

This is a paradigmatic case of psychosomatic medicine, reflecting the importance of addressing psychiatry conditions which are known to be risk factors for cardiovascular conditions.

Literature References

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