

Takotsubo Cardiomyopathy, A case study of Broken Heart Syndrome

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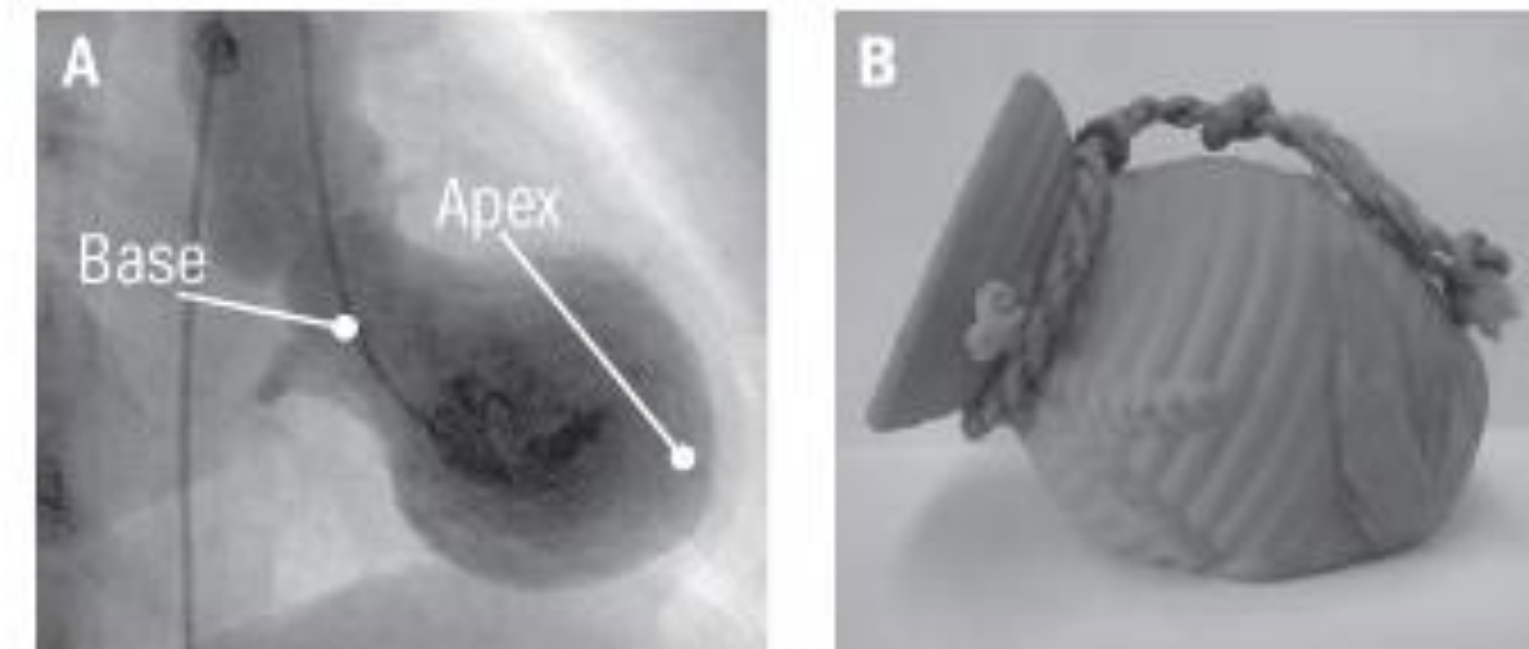
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Background

Takotsubo cardiomyopathy is a heart event that happens when part of the heart muscle suddenly becomes weakened or “stunned”, causing symptoms like a heart attack. Takotsubo cardiomyopathy occurs predominantly in postmenopausal women soon after exposure to sudden, unexpected emotional or physical stress. Mechanisms underlying susceptibility and recurrence are not well understood. The prognosis of patients with takotsubo cardiomyopathy is generally favorable; however, there are reported cases of fatal complications such as left ventricular free wall rupture.

Imaging

Apical ballooning and the tako-tsubo



An x-ray of the left ventricle (A) shows apical ballooning, a reversible abnormality characteristic of takotsubo cardiomyopathy. During systole (cardiac contraction) the midsection and tip (apex) of the left ventricle balloon out, while the area above, called the base, contracts normally. The shape is similar to that of a tako-tsubo (B), a round-bottomed, narrow-necked vessel used to catch octopuses.

Discussion

- The patient watched the game in its entirety. Unfortunately the patients lifelong favorite team had lost in a very surprising outcome, as they had heavily favored to win.. Nursing staff was checking on other patients during the game, and returned after at the games conclusion to check on the patient.
- Upon entering patients room, she was found sitting up in bed unresponsive, with no respirations, and with no palpable pulses. Code Blue was activated and 911 called. CPR was performed by nursing staff. Unfortunately patient was unable to be revived and the patient expired and was pronounced dead at the bedside.

Case Report

A 62 Year old Caucasian female presented to the nursing and rehab center post hospitalization with the diagnosis of diabetic ketoacidosis. Past medical history includes: HTN, DM, neuropathy, history of CVA, and ambulatory dysfunction requiring wheelchair assistance. She progressing well with rehab and made steady improvements. Patient was doing well and was in good spirits. During her time in rehabilitation the Super bowl was scheduled to take place. Her favorite football team, the favored to win New England Patriots were playing against the local team, the Philadelphia Eagles(the underdog).The patient had been a lifelong New England Patriots fan and was very much looking forward to the game. According to the caregivers and nursing, the patient was both excited and nervous during the game.

Nursing staff said that the weekend of the Super Bowel the patient had mild cold symptoms, and wanted to stay in bed to watch the game. During the games she at times would fall asleep, but easily awakened when checked on.

Throughout the game the patient continued to be excited to watch her favorite team play, but became increasingly nervous. As the game progressed her mood continued to become more anxious and upset as the Philadelphia Eagles outscored the New England Patriots.

References

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Conclusion

- In the week and days leading up to the Super Bowl the patient had been in good health, making appropriate progress in rehab, and had a good outlook on her recovery.
- Due to the patient being stable, no concerning vital signs, in no acute distress prior to the game, cause of death was believed to be Takotsubo Cardiomyopathy, also known as Broken Heart Syndrome.
- The patients life long favorite team lost to the underdog, the Philadelphia Eagles in exciting fashion, maybe too exciting.
- Research continues to investigate the possible causes and pathophysiology that leads to Takotsubo Cardiomyopathy and the effects it has on the heart.