1-19-2016

An Unusual Presentation of Stress Cardiomyopathy

Marcus St. John

Baptist Hospital of Miami; South Miami Hospital; West Kendall Baptist Hospital

Follow this and additional works at: http://scholarlycommons.baptisthealth.net/se-all-publications

Citation
http://scholarlycommons.baptisthealth.net/se-all-publications/932

This Conference Poster -- Open Access is brought to you for free and open access by Scholarly Commons @ Baptist Health South Florida. It has been accepted for inclusion in All Publications by an authorized administrator of Scholarly Commons @ Baptist Health South Florida. For more information, please contact Carrief@baptisthealth.net.
## Background

Stress (Takotsubo) cardiomyopathy is a condition which may resemble acute myocardial infarction. While the exact cause is still unknown it is hypothesized to result from increased production of catecholamines. The low prevalence of Takotsubo in the US and the often atypical presentation of women with heart disease make diagnosing this condition a challenge in women.

## Patient Presentation

Here we present the case of a 58 year-old woman with a history of COPD, smoking, hypertension, and cervical spine surgery who presented to the hospital with a 6 out of 10 headache associated with nausea and left-sided facial paresthesia of one day's duration. The patient had a history of migraines and was taking oxycodone and sumatriptan with no relief. It felt unlike prior episodes and she was admitted for further evaluation. Head CT and MRI ruled out stroke as the etiology of her new symptoms. The following day the patient developed left jaw, shoulder, and chest pain and cardiology was consulted. She had borderline elevation of cardiac troponin I (0.71ng/ml) and anterolateral T-wave inversions on ECG; both concerning for possible NSTEMI.

## Evaluation

- Pharmacologic nuclear stress showed cardiomyopathy with EF of 31% and a partially reversible defect in the anterior wall consistent with induced ischemia
- Cardiac catheterization confirmed severe cardiomyopathy but normal appearing coronary arteries

## Diagnosis

**Fig A.** Left Ventriculogram demonstrating the typical Takotsubo shape

**Fig B.** Coronary Catheterization demonstrating normal coronary arteries

## Timeline

<table>
<thead>
<tr>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pt presents with headache associated with jaw and chest pain</td>
</tr>
<tr>
<td>2</td>
<td>Cardiology consult and stress test</td>
</tr>
<tr>
<td>3</td>
<td>Catheterization and Diagnosis of Stress Cardiomyopathy with reduced EF</td>
</tr>
<tr>
<td>4</td>
<td>Discharged on Standard Cardiomyopathy therapy</td>
</tr>
<tr>
<td>7</td>
<td>Pt presents after episode of syncope</td>
</tr>
<tr>
<td>8</td>
<td>MUGA scan shows improved EF</td>
</tr>
</tbody>
</table>

## Treatment

- Mechanical support as needed
- Standard therapy for cardiomyopathy including beta blocker and angiotensin converting enzyme inhibitors

## Take Home Points

- Current literature suggests a relationship with stress cardiomyopathy and stroke but presentations due to headache are relatively rare
- This case illustrates a unique presentation of stress cardiomyopathy due to severe headache and supports the hypothesis that catecholamine surge (in this case due to pain) may be a causative factor
- It also highlights the management and often favorable prognosis of this type of cardiomyopathy

## References