INTRODUCTION

• Takayasu's Arteritis (TA) is a rare disease affecting women between ages 10 and 40 years.
• Thoracic Aortic Coarctation is present in 0.5-2% of cases of TA. [3]

LEARNING OBJECTIVES

• To illustrate a rare manifestation of TA
• To illustrate that aortic coarctation can be a cause of secondary hypertension in patients with TA
• To illustrate that surgical correction can lead to a rapid resolution and a reduction in polypharmacy.

CASE PRESENTATION

HPI:
A 56 year old woman with a history of TA, diabetes, hypertension, hyperlipidemia presented to the emergency department (ED) with acute onset 10/10 chest pain radiating to her back.

In the ED, her blood pressure was 235/87 and her heart rate was 87 beats per minute. Evaluation for cardiac ischemia was unremarkable with normal troponin levels and an unchanged electrocardiogram. When a computed tomographic (CT) scan was performed, it showed a marked narrowing of the thoracic aorta with diffuse calcifications. She was admitted to the Cardiology service for further work up.

PHYSICAL EXAM:
VS: T 96.6 HR 71 BP 173/54 RR 17 SpO2: 97% RA
General: Alert and oriented to person, not place
HEENT: Pupils equal round reactive bilaterally. No papilledema. JVP not elevated
CV: S1/S2 regular rate/rhythm. PMI displaced to the left lower sternal border.
Palm: clear air entry bilaterally
Abd: soft nontender nondistended with normoactive bowel sounds
Extremities: warm well perfused with 2+ peripheral pulses

LABORATORY STUDIES:

Remarkable for a mild hypotension. Troponins were negative and EKG showed no ischemic changes.

DISCUSSION

• A diagnosis of aortic coarctation secondary to TA was made
• Despite being on intravenous antihypertensive agents, her blood pressure remained difficult to control throughout her hospitalization.
• Rheumatology was consulted regarding her TA and initially recommended an FDG-PET to determine whether or not she was an active flare. When these imaging studies and inflammatory markers were negative, an active flare was essentially ruled out and no corticosteroids were administered.
• Given her refractory hypertension and extensive calcification, Vascular Surgery was consulted and performed a descending thoracic aorta to celiac axis, superior mesenteric artery, right renal artery, and left common iliac artery bypass. There were no postoperative complications and she was discharged ten days later.
• On her follow up appointment one month later, she was chest pain free and her blood pressure had markedly improved so that she only needed two medications compared to her previous four medication regimen.

REFERENCES