A case of paroxysmal obstruction of right coronary ostium

Adam Adler MD  
Baystate Health, adam.adler@baystatehealth.org

Toni Chahla MD  
Baystate Health, toni.chahla@baystatehealth.org

Srinivasa Gutta MD  
Baystate Health, srinivasgutta@yahoo.com

Stanlies D’Souza MD  
Baystate Health, dsouzastan@yahoo.com

Follow this and additional works at: https://scholarlycommons.libraryinfo.bhs.org/all_works

Part of the Medicine and Health Sciences Commons

Recommended Citation
INTRODUCTION
Papillary fibroelastomas (PFE) are the second most common primary cardiac neoplasm and the most common valvular tumor. Frequently arising at areas of high flow, PFEs are potential causes of ostial obstruction leading to myocardial ischemia and hemodynamic instability.

CASE DESCRIPTION
A 61-year-old female presented after experiencing severe chest pain. EKG was normal however serum troponin was elevated. She underwent emergent catheterization during which a mobile mass was observed to be adjacent to and occasionally obstructing the right coronary ostia. She was scheduled for elective surgery, however, she developed transient EKG changes and hypotension overnight and was taken to the OR for emergent resection. She was prepped, draped with defibrillation pads in place prior to induction, with the surgeons scrubbed and gowned, ready to open the chest. Arterial and central venous lines were placed awake with 5mg midazolam titrated in at 0.5mg over 1 hour. Due to baseline hemodynamic instability with hypotension, a phenylephrine infusion was started targeting to systolic blood pressures of >160. Induction of anesthesia for endotracheal intubation was accomplished with 2mg midazolam, 30mg propofol, 150mcg fentanyl and 120mg succinylcholine. She was intubated uneventfully, and without desaturation and scopolamine 0.4mg IV was given. The patient was systemically heparinized and cannulated in the aorta and right atrium for cardiopulmonary bypass. Transverse aortotomy was performed revealing a 2 x 2 cm friable mass attached to a portion of the right coronary cusp free edge of the aortic valve. The patient was transferred to the cardiac intensive care unit and extubated on the day of surgery. The following morning, the patient was resting comfortably and had no memories of the awake preparation in the OR.

DISCUSSION
Papillary fibroelastomas adjacent to coronary ostia can obstruct the coronary arteries leading to acute ischemia changes and hemodynamic instability. In this case, the anesthetic management was aimed at preventing hypotension and thus, coronary ischemia. Additionally, preparation was made for possible emergency defibrillation and the surgical, anesthesia and perfusion teams were ready to initiate CPB immediately should hemodynamic instability occur. The use of carefully titrated midazolam and scopolamine was incorporated to ensure amnesia and improve patient satisfaction.

REFERENCES