Abstract Submission Form

The Women's Heart Center Program Committee is accepting abstract submission forms through **August 15, 2025**. Completed forms should be emailed to WHC@TheChristHospital.com.

Abstract submissions should be gender- and sex-specific research pertaining to one of the program topics outlined below.

The Program Committee wishes to encourage young scientific investigators and will reward up to 4 abstracts/posters submitted by presenters considered early career (definition provided below). First place will receive $1000, second place will receive $500, and two honorable mentions will each receive $250.

The presenting author will be sent an email with the status of the submission by **August 22, 2025**. If your abstract is accepted, your notification will contain complete presentation information. However, please note the following:

- All human subject research must conform to the principles of the Declaration of Helsinki of the World Medical Association.
- The presenting author should be able to provide documentation of IRB approval if requested.
- The Program Committee is unable to reimburse presenters for travel, hotel, or per diem expenses.
- Submission of an abstract constitutes a commitment by the presenting author (or designee) to present in-person at the symposium on October 3, 2025, during the following times:
    - Registration & Networking: 7:00 – 8:00 am
    - Networking Lunch: 12:00 – 1:30 pm
    - Poster Session Award Announcement: 4:50 – 5:10 pm
- All accepted abstract presenters must register for the symposium via Eventbrite and pay the applicable registration fees (trainees and invited speakers will have the registration fee waived).
- If an author wishes to withdraw an abstract, please email WHC@TheChristHospital.com.

Presenting Author Information

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Early Career (Defined as physicians, scientists, medical students, and other healthcare providers currently in residency or fellowship programs or within three years of training)? Yes ☒ No ☐

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Disclosures: Please list any relevant financial disclosures.
None

Abstract Topic (must be gender- or sex-specific)

- ☐ Preventative cardiology
- ☐ General cardiology
- ☒ Interventional cardiology
- ☐ Heart failure
- ☐ Cardio-oncology
- ☐ Cardio-obstetrics
- ☐ Electrophysiology
- ☒ Cardiovascular Imaging
- ☐ Coronary Microvasculature
- ☐ Social Determinants of Health
- ☐ Mental Health
- ☐ Precision Medicine

Title: Include the full title as it will appear on the poster.
Spontaneous Coronary Artery Dissection–Related STEMI in a Patient with Fibromuscular Dysplasia Complicated by Cardiac Arrest, Cardiogenic Shock, and Vascular Bleeding

Background:

Spontaneous coronary artery dissection (SCAD) is a non-atherosclerotic, non-traumatic, non-iatrogenic condition characterized by intramural hemorrhage in a coronary artery. Although SCAD accounts for <1% of all myocardial infarctions, it causes up to 35% of acute coronary syndromes (ACS) in women ≤50 years old. Fibromuscular dysplasia (FMD) has been reported in up to 86% of SCAD cases.

Methods: Briefly state the methods used.

We describe a rare case of SCAD-related ST-elevation myocardial infarction (STEMI) in a 55-year-old woman with Hashimoto's thyroiditis, asthma, migraine, and hypertension. She presented with ST elevations in anterolateral leads and peaked T waves (Figure 1). En route to the emergency department, she developed ventricular tachycardia requiring 40 minutes of ACLS. During resuscitation, she received intravenous heparin and tissue plasminogen activator (tPA) as salvage therapy. Post-ROSC, emergent left heart catheterization revealed total mid-distal LAD occlusion consistent with type B SCAD (Figure 2). PCI with drug-eluting stent placement was performed, and an Impella device was inserted for cardiogenic shock (Figure 3).

A left femoral hematoma developed post-catheterization. In the ICU, it expanded, with rising vasopressor needs and evidence of disseminated intravascular coagulation, likely from prior tPA and heparin. CT imaging revealed extensive bleeding: large intramuscular and subcutaneous hematomas in the left thigh, retroperitoneal hemorrhage, right axillary hematoma, and a small left parietal subdural hematoma. She underwent urgent surgical repair of the left common and superficial femoral arteries. Hemodynamics improved postoperatively, and the Impella was removed followed by repair of the right CFA and femoral vein.

She was extubated, stabilized hemodynamically, and her hemoglobin levels remained steady without further bleeding. As the subdural hematoma remained stable, clopidogrel and low-dose aspirin were initiated. She was discharged on dual antiplatelet therapy, statin, carvedilol, amlodipine, hydralazine, spironolactone, and a wearable defibrillator. Outpatient abdominal MRA revealed bilateral renal artery "string of beads" and left external iliac artery beading, consistent with FMD. She underwent bilateral renal artery angioplasty for resistant hypertension.

Results: Summarize the results in sufficient detail to support the conclusions.

Patients presenting with SCAD as a STEMI have higher risks of significant complications and increased mortality. They are more likely to develop cardiogenic shock requiring treatment with inotropes and MCS. Female sex, uncontrolled hypertension and fibromuscular dysplasia are risk factors that predispose to the development of SCAD and are related to the severity of presenting syndrome. In our case, such a patient had a complicated presentation with STEMI complicated by VT-CA with prolonged ACLS. After successful timely identification of the culprit lesion and deployment of the stent, her course was further burdened by significant vascular and bleeding complications that warranted a multidisciplinary approach, invasive surgical interventions that resulted in successful control of bleeding and initiation of anti-platelet therapy.

Conclusions: Concisely state the conclusions reached.

Patients presenting with ACS may have SCAD as an etiology. Timely diagnosis and appropriate treatment of this condition are crucial in achieving good clinical outcomes. Unfortunately, temporal delays in presentation and/or diagnosis may create devastating complications, treatment of which could cause a series of additional complications and further increase in morbidity and mortality.

Tables/Figures/Graphics: Include images that are part of your submission here. Images should be high resolution and have a file type of “gif”, “jpg”, or “jpeg”.

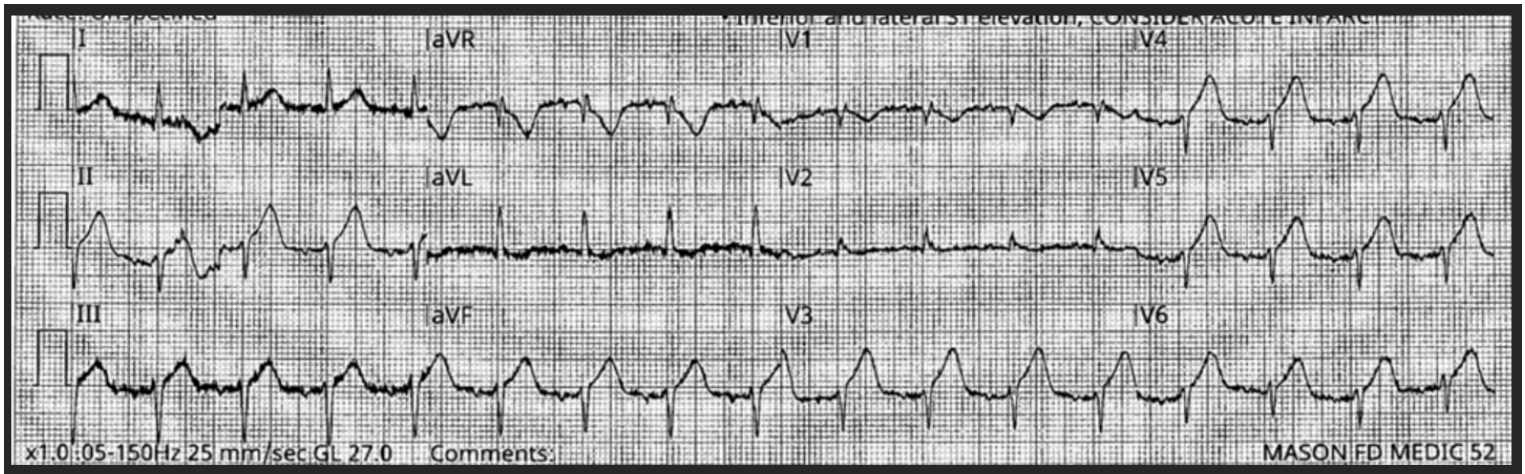

Figure 1

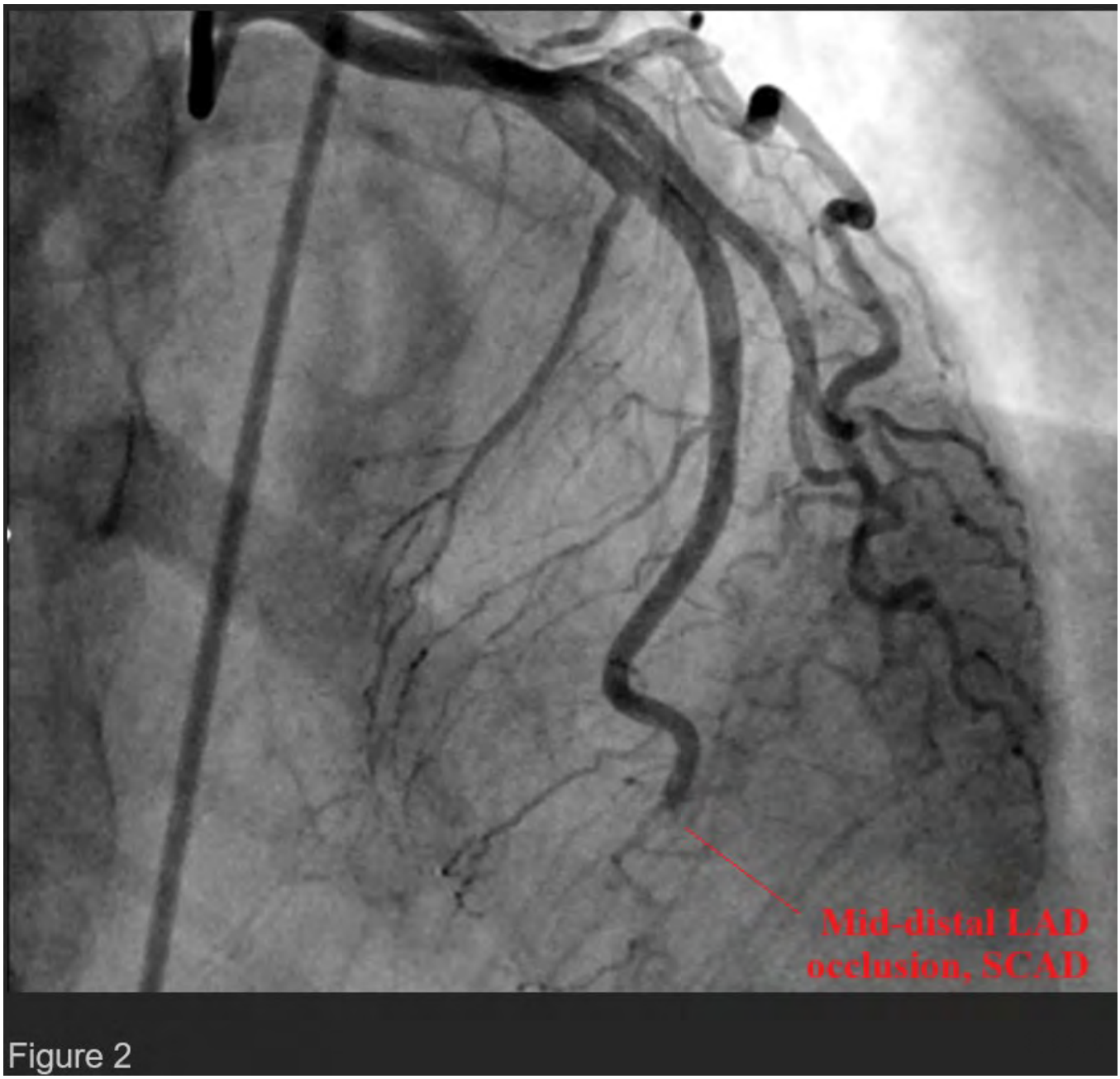

Figure 2

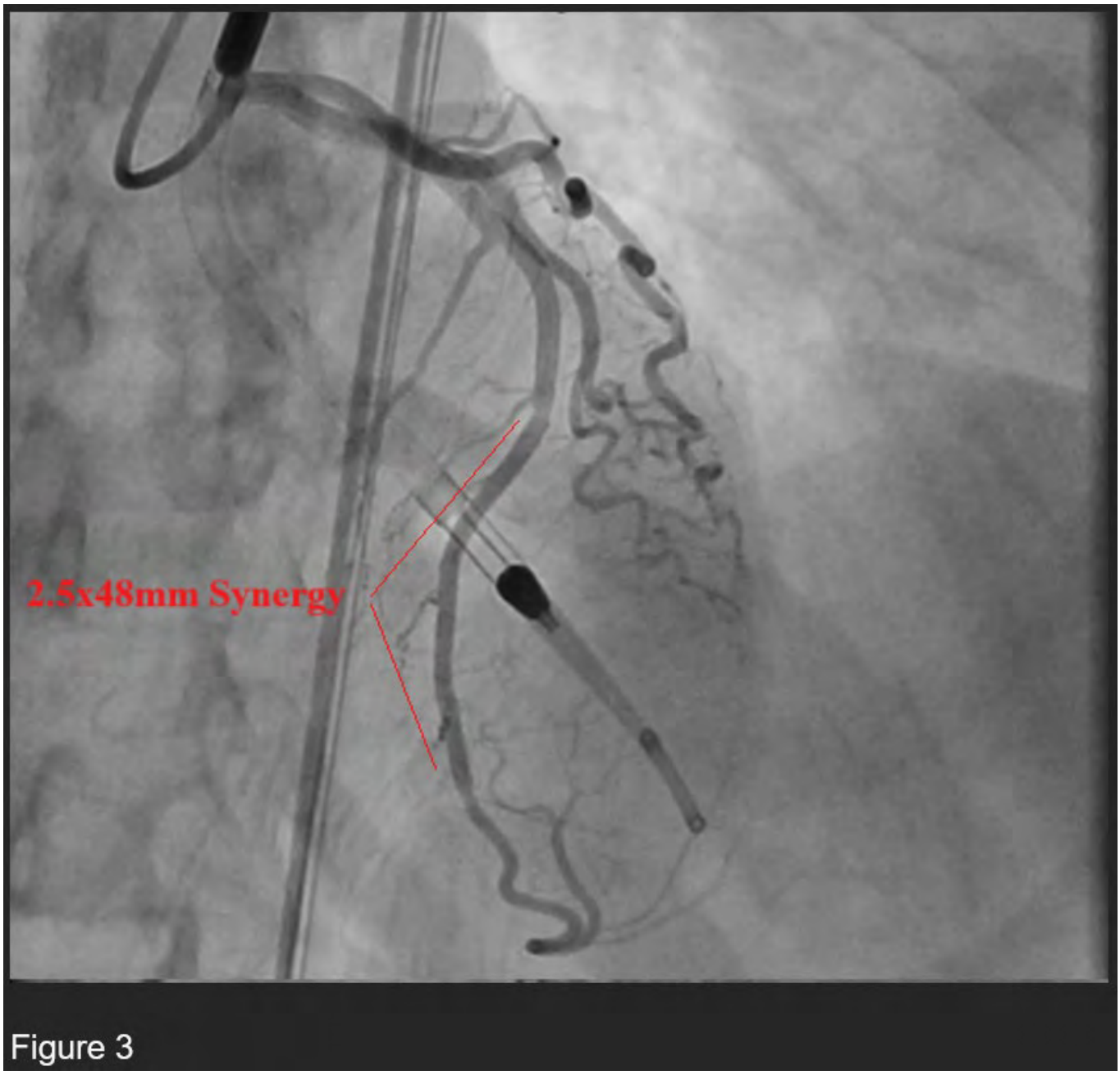

Figure 3