

# Patient with severe LM stenosis and AS

## *How would I treat*

**Jian Ye, MD, FRCSC**

**Clinical Professor of Surgery**

**Division of Cardiac Surgery, St. Paul's Hospital  
University of British Columbia, Vancouver, Canada**

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Centre for  
Heart Valve Innovation  
St. Paul's Hospital, Vancouver



**HEART CENTRE**  
AT ST. PAUL'S HOSPITAL

# Issues in This Case

- **Elderly patient**
- **Severe AS**
- **Critical LM stenosis (significant calcification)**
- **Moderate to severe MR (likely functional)**
- **Low LVEF 25-30%**
- **Acute heart failure with significant pulmonary edema and inotropic support**

# Option #1

**If the patient was independent, relatively high functioning prior to this acute event, surgery would be the best option for her long-term clinical outcomes.**

- **No significant comorbidity**
- **Normal eGFR**
- **Calcified, critical LM stenosis**
- **No significant thinning of the LV wall except apical region**
- **High risk for either aortic or LM intervention at the unstable condition**
- **Surgical mortality would be similar to interventional procedure because of unstable hemodynamics and respiratory status.**

# Option #2

**If the patient was not a candidate for surgery due to frailty or the patient refused the surgery, the safest way to treat the patient would be PCI + TAVI under the support of ECMO.**

- **Unstable hemodynamics and respiratory status**
- **High risk for either LM stent (calcified LM) or TAVI**
- **Unlikely to have successful resuscitation if cardiac arrest occurs during either procedure**
- **Prefer to perform the procedure in a hybrid OR**

# Option #3

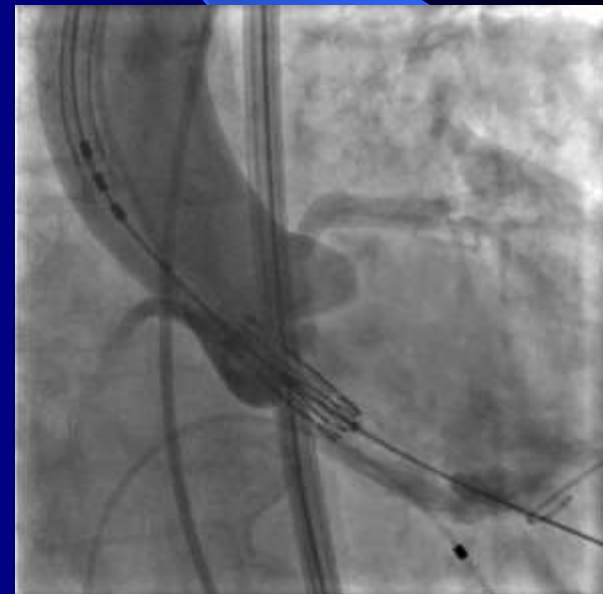
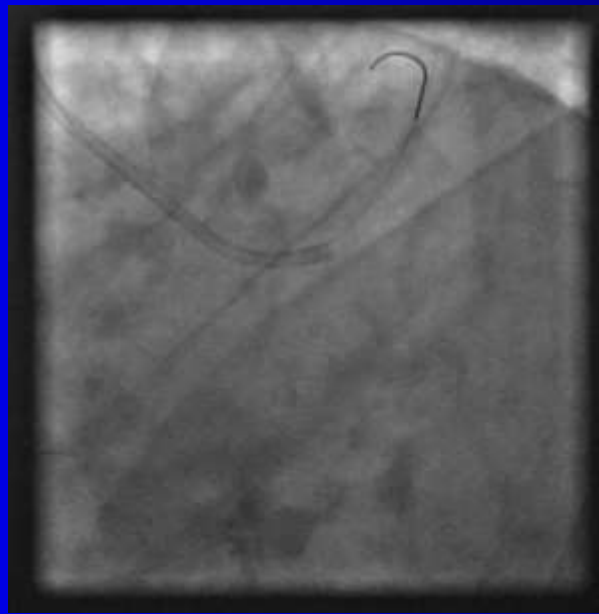
**ECMO or CPB standby, or under IABP support, perform a staged procedure depending on a center/operator's experience:**

- **PCI to LM → TAVI**
- **TAVI with a low profile THV → PCI to LM**
- **BAV to stabilize the patient first**

# General comment

If a patient is not in an acute event with unstable hemodynamic or respiratory status, I prefer a stage procedure:

PCI to left main → TAVI



**Thanks for sharing the very  
interesting and challenging  
case**