

# How I Do It: Ross Procedure

Marko T. Boskovski, MD MHS MPH  
Assistant Professor of Surgery  
Director of Ross and  
Aortic Valve Preserving Surgery  
Division of Cardiothoracic Surgery

# Disclosures

- Edwards Lifesciences - consulting

# Setup and Pulmonary Valve Inspection

Cannulate high

Clamp above RPA takeoff

Aortotomy 1cm above STJ

Open PA proximal to RPA  
takeoff

Inspect pulmonary valve

Size pulmonary annulus



# Setup and Pulmonary Valve Inspection

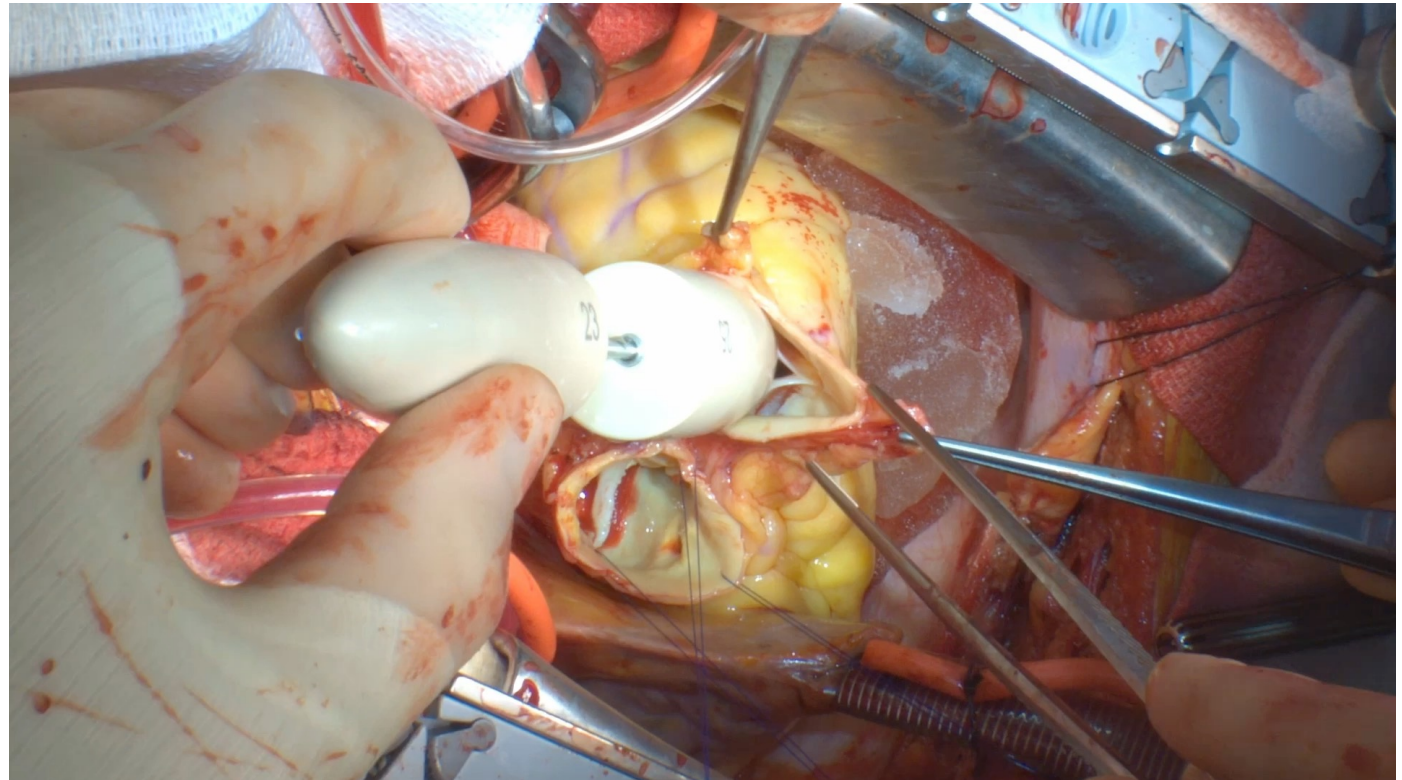
Harvest coronary buttons

Dissect along annulus

Dissect LM off posterior PA

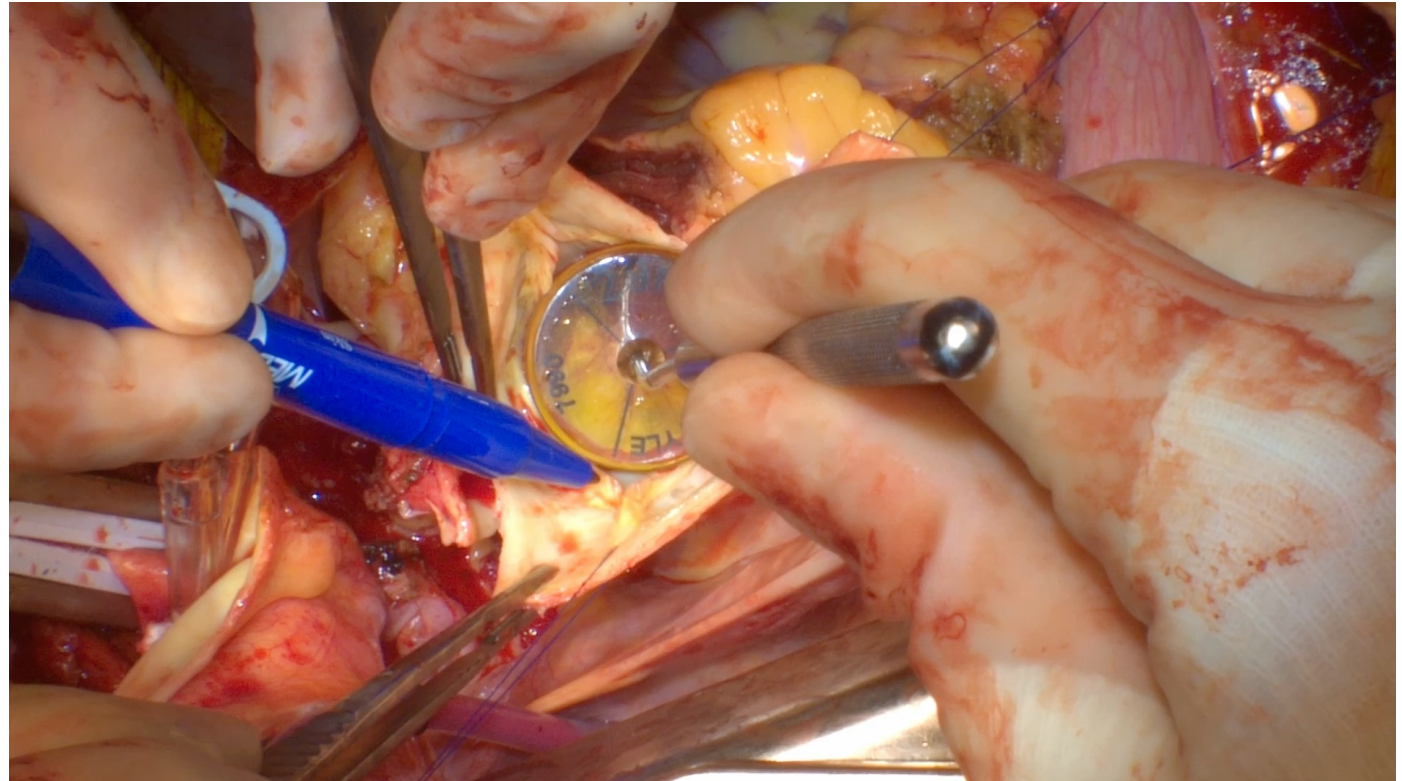
Go as deep as possible!

Right angle under non-facing cusp



# Autograft Implantation with Running Technique

Mark “neo” commissures  
120 degrees apart  
Retraction sutures through  
commissures and autograft  
Intra-annular implantation  
Planar implantation – don’t  
go up the commissures



# Annuloplasty and Coronary Buttons

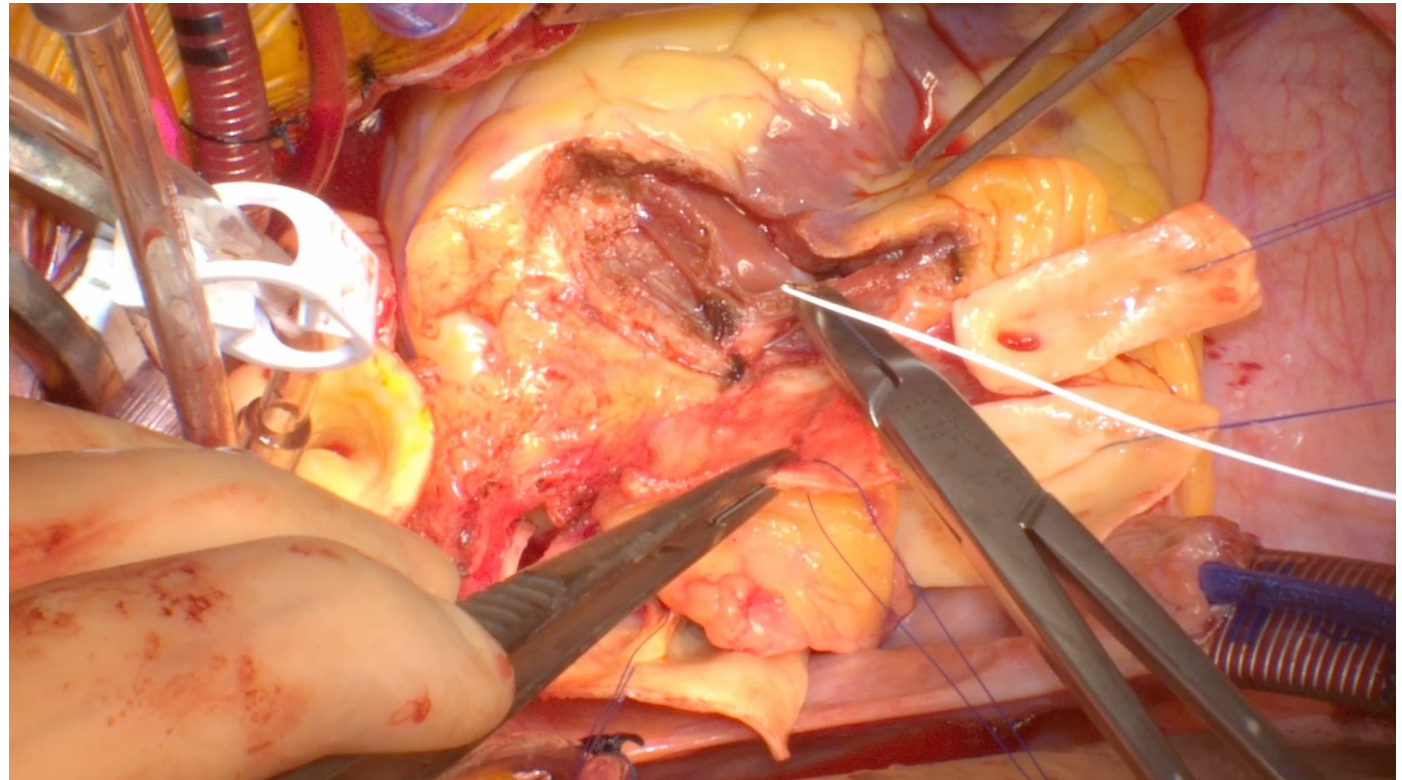
Goretex CV-0 suture

Travel at the nadirs of the  
sinuses

Tie over hegar dilator

Small arteriotomy for  
coronary buttons

Implant with “double bites”  
for improved hemostasis



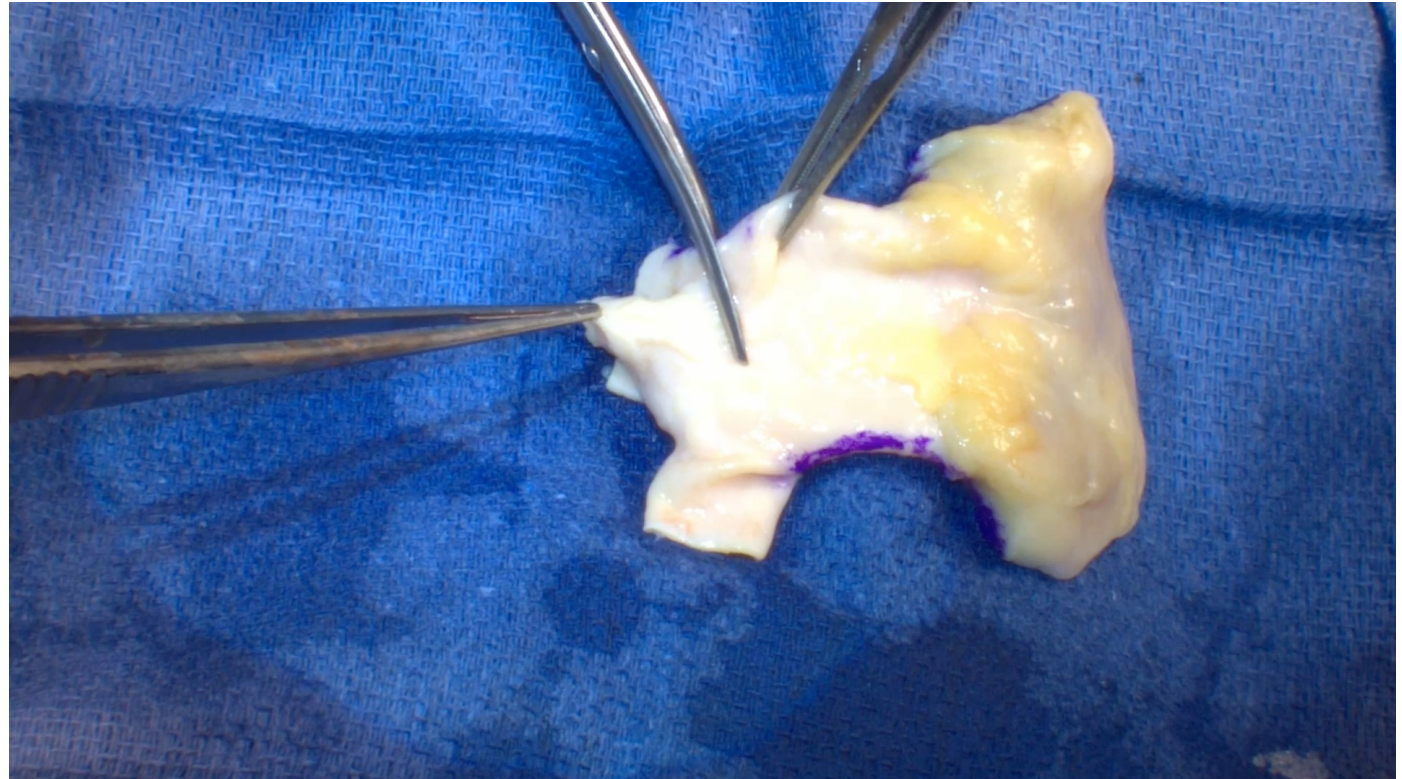
# Annuloplasty and Coronary Buttons

Oversized, decellularized  
homograft

Typically 28-30mm

Anchor distal anastomosis  
laterally to avoid stenosis

Proximal anastomosis -  
avoid large bites laterally  
near LAD and first septal

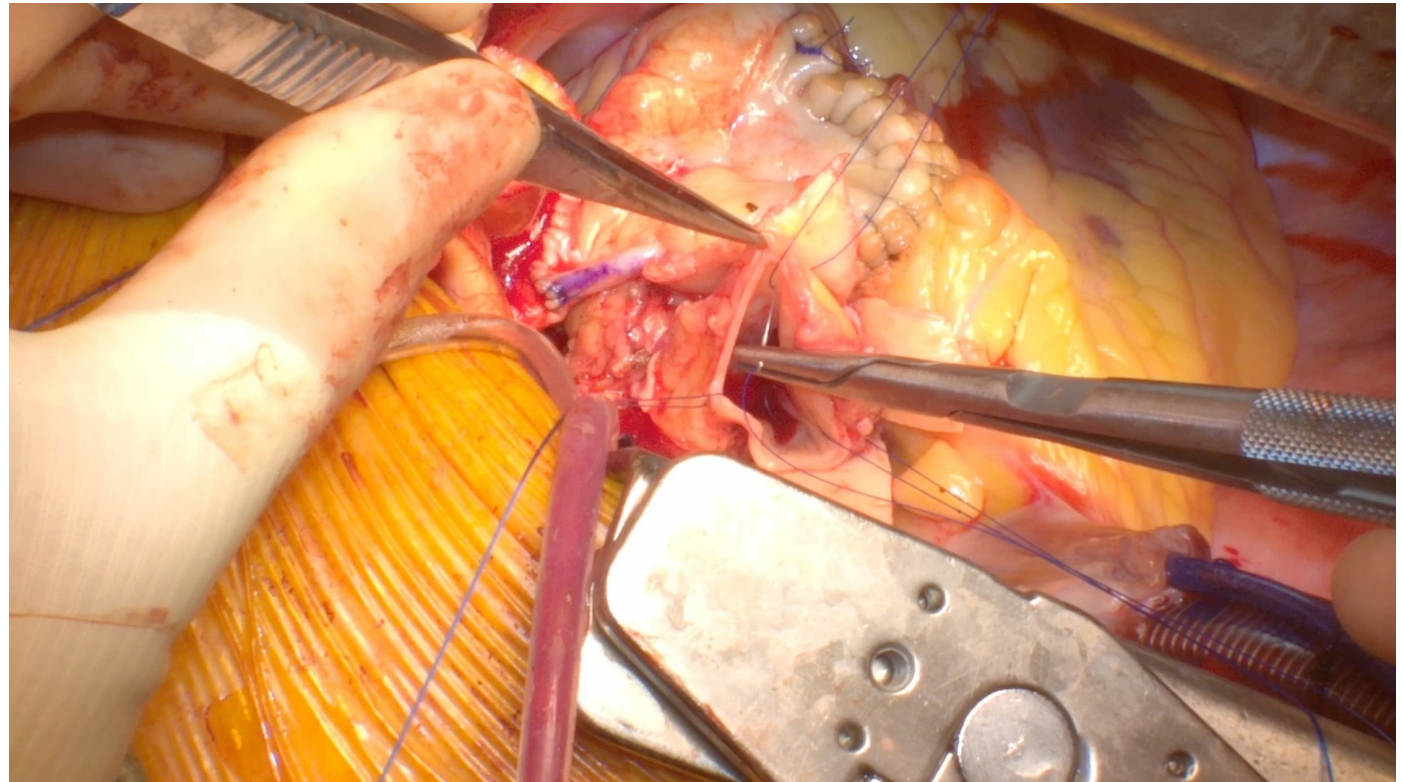


# Annuloplasty and Coronary Buttons

Do NOT leave any PA  
distal to the STJ

Routinely stabilize STJ with  
interposition graft

Incorporate remnant aorta  
in distal anastomosis to  
create an "inclusion jacket"  
around autograft





A photograph of the Golden Gate Bridge in San Francisco, California, taken during sunset. The bridge's iconic red-orange towers and suspension cables are silhouetted against a sky of orange, yellow, and blue. The bridge spans across the water, with a rocky coastline in the foreground. The text "Thank you!" is overlaid in white on the lower left side of the image.

**Thank you!**