#### STS/EACTS Latin America Cardiovascular Surgery Conference November 15-17, 2018 Hilton Cartagena | Cartagena, Colombia The Society of Thoracic Surgeons EACTS

### Aortic valvuloplasty: Ozaki Procedure





# How do I perform the Ozaki procedure in children



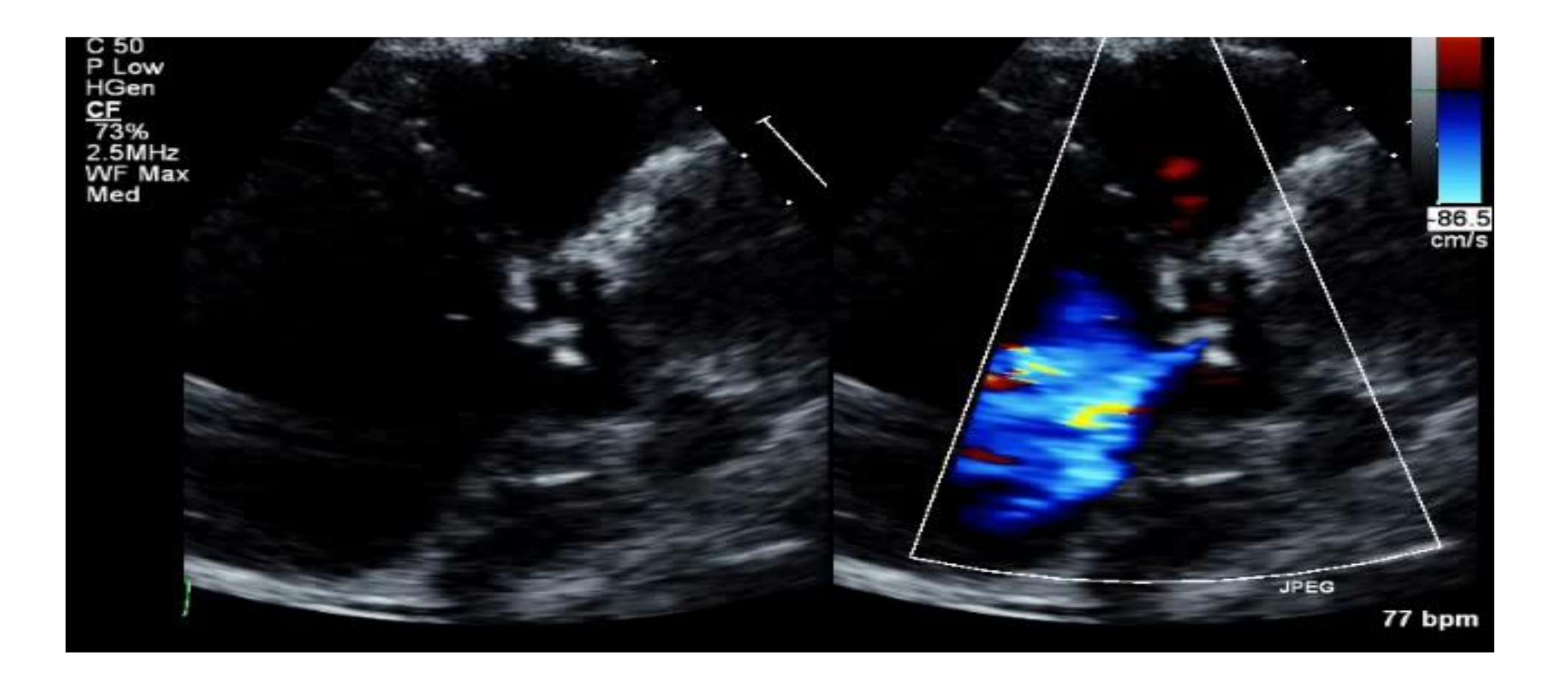


Pedro J. del Nido, MD **Boston Children's Hospital** Harvard Medical School

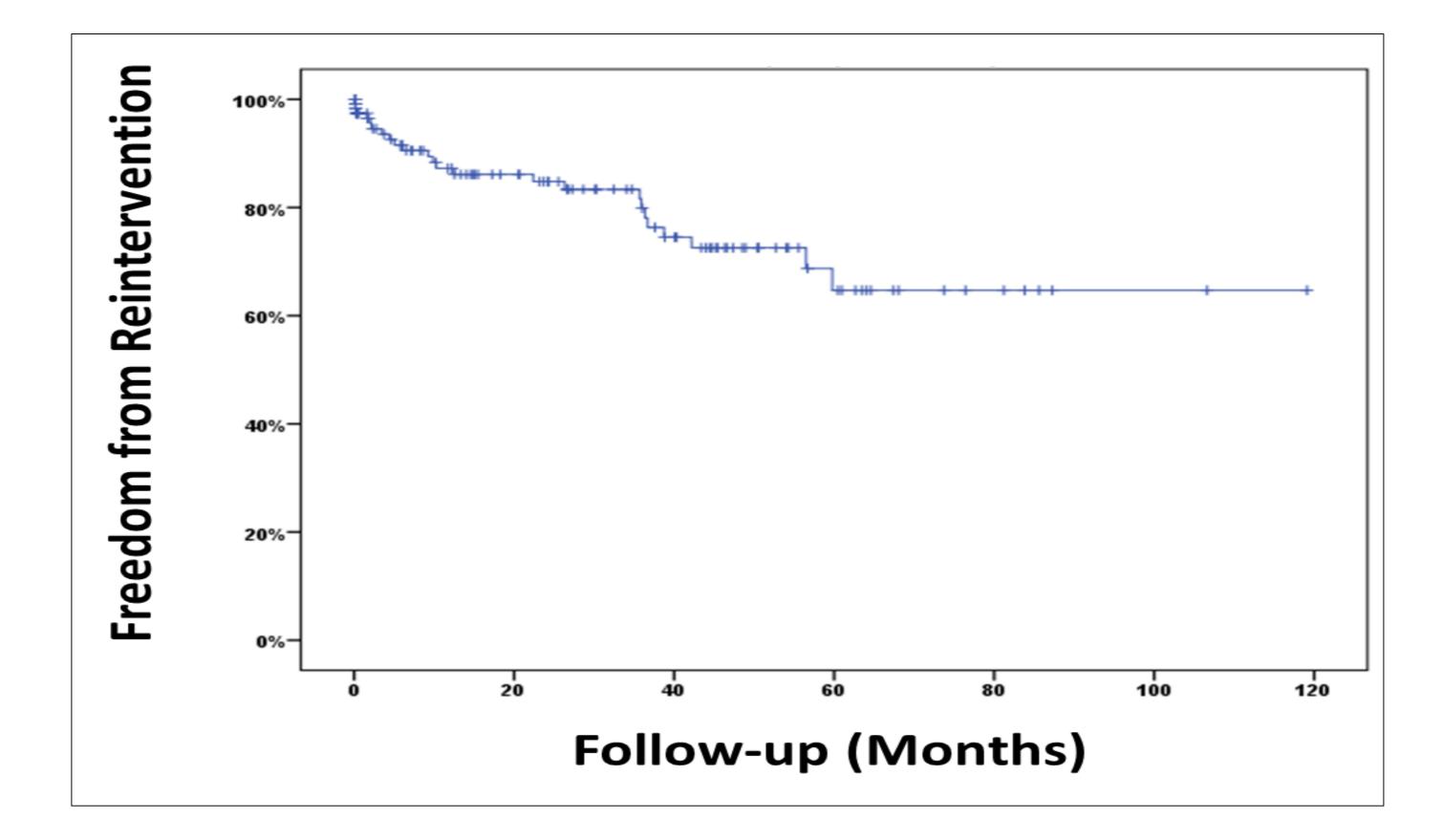
No Disclosures



### Case: 16 y/o AS/AR

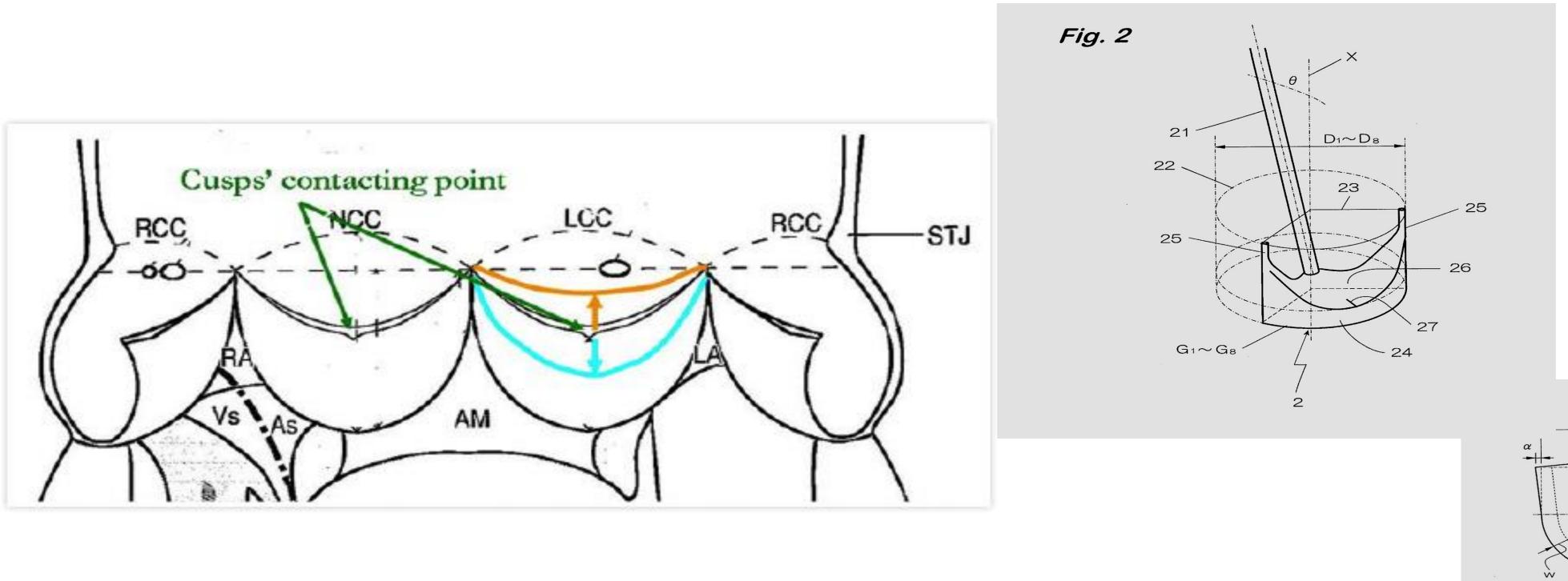


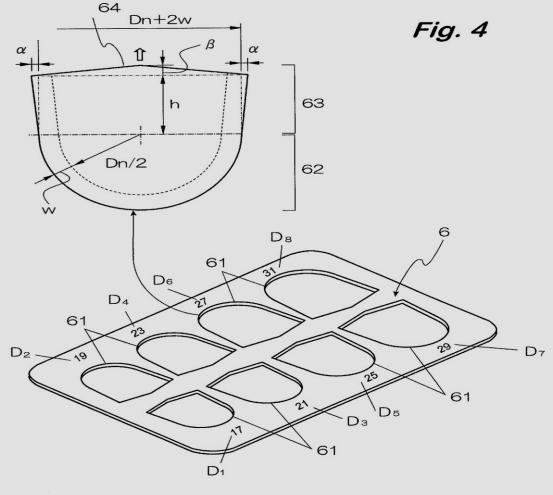
#### Results of Ao valve repair in teens (BCH)



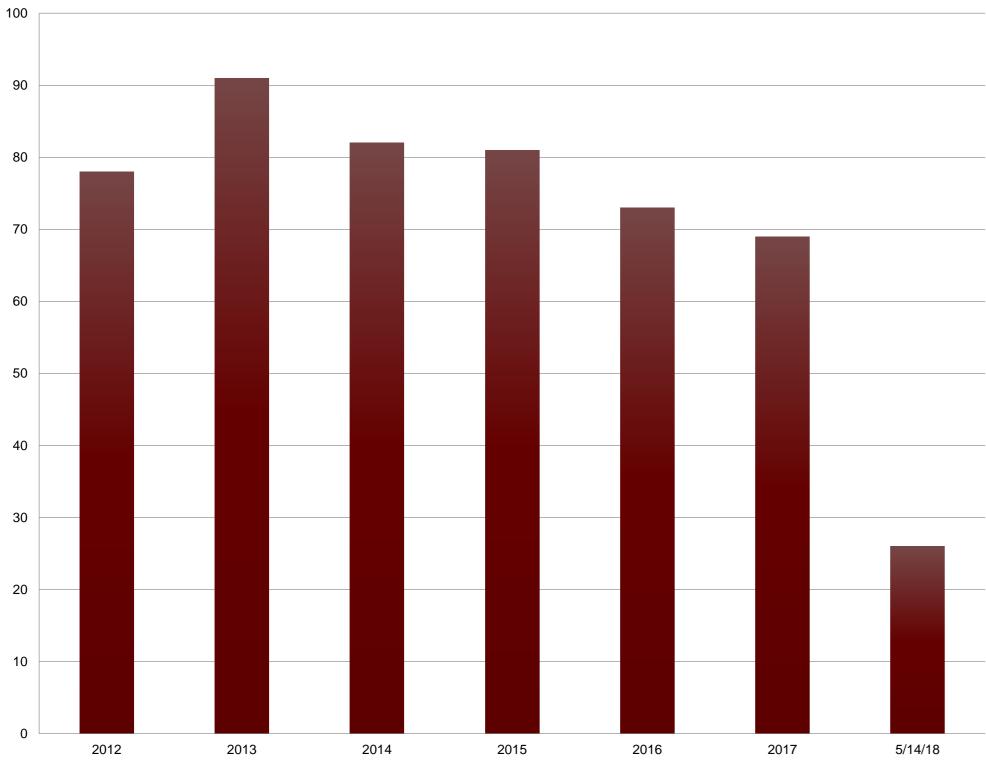
#### 2005-2015 median age 15yrs. (11.5-22yrs.) n=121;

#### Aortic Valve Reconstruction: The Ozaki Technique

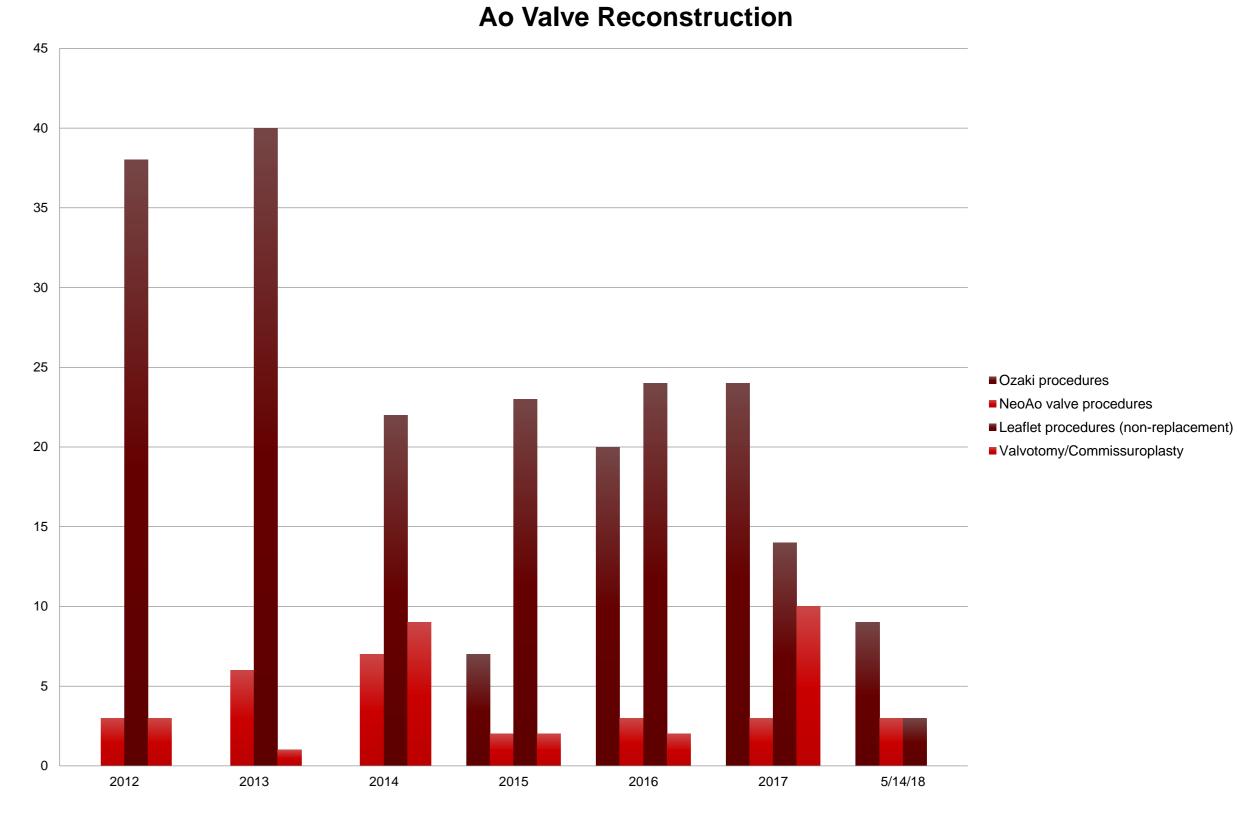




### **Boston Children's Experience**

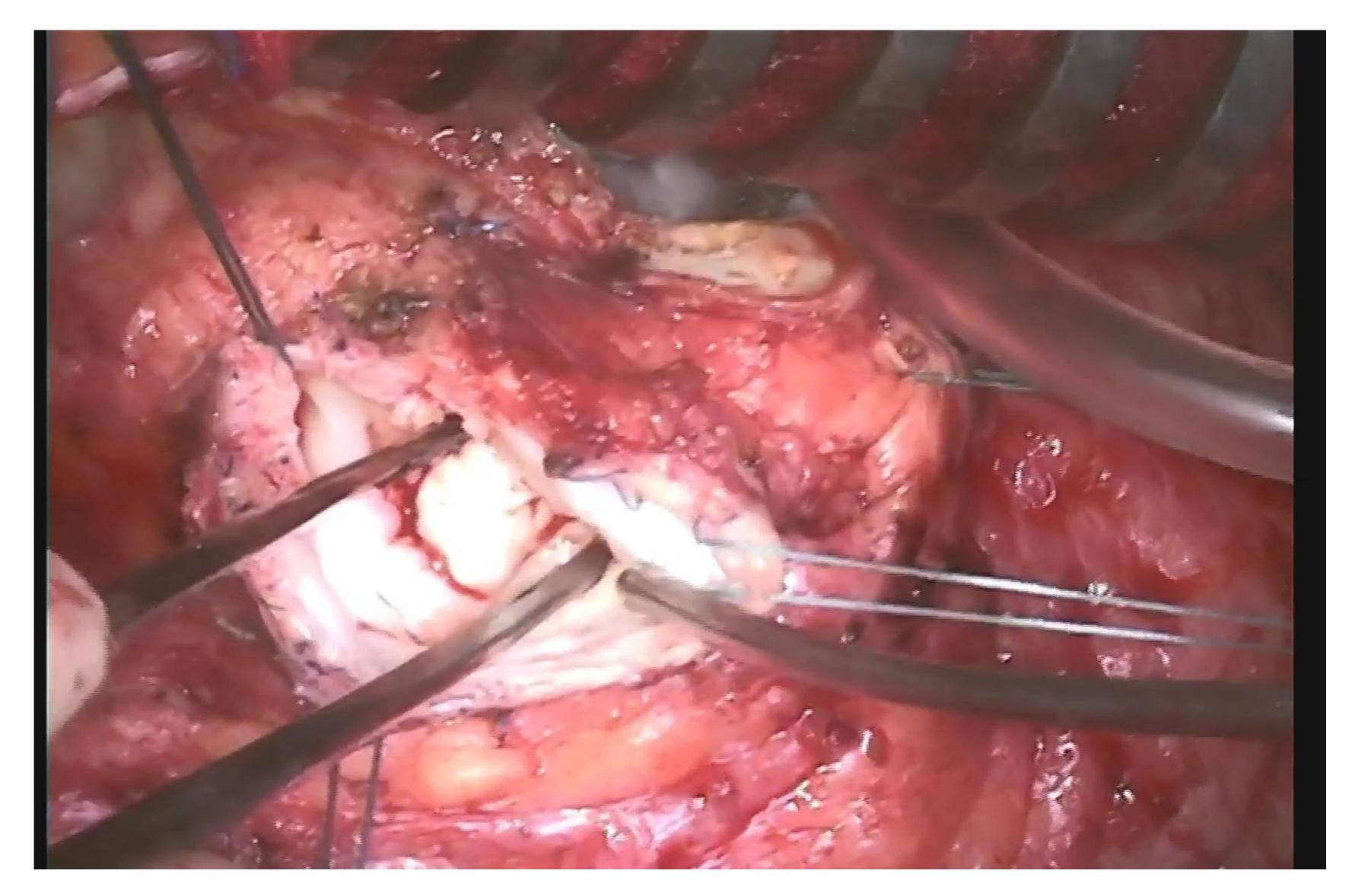


**Total Aortic Valve procedures** 

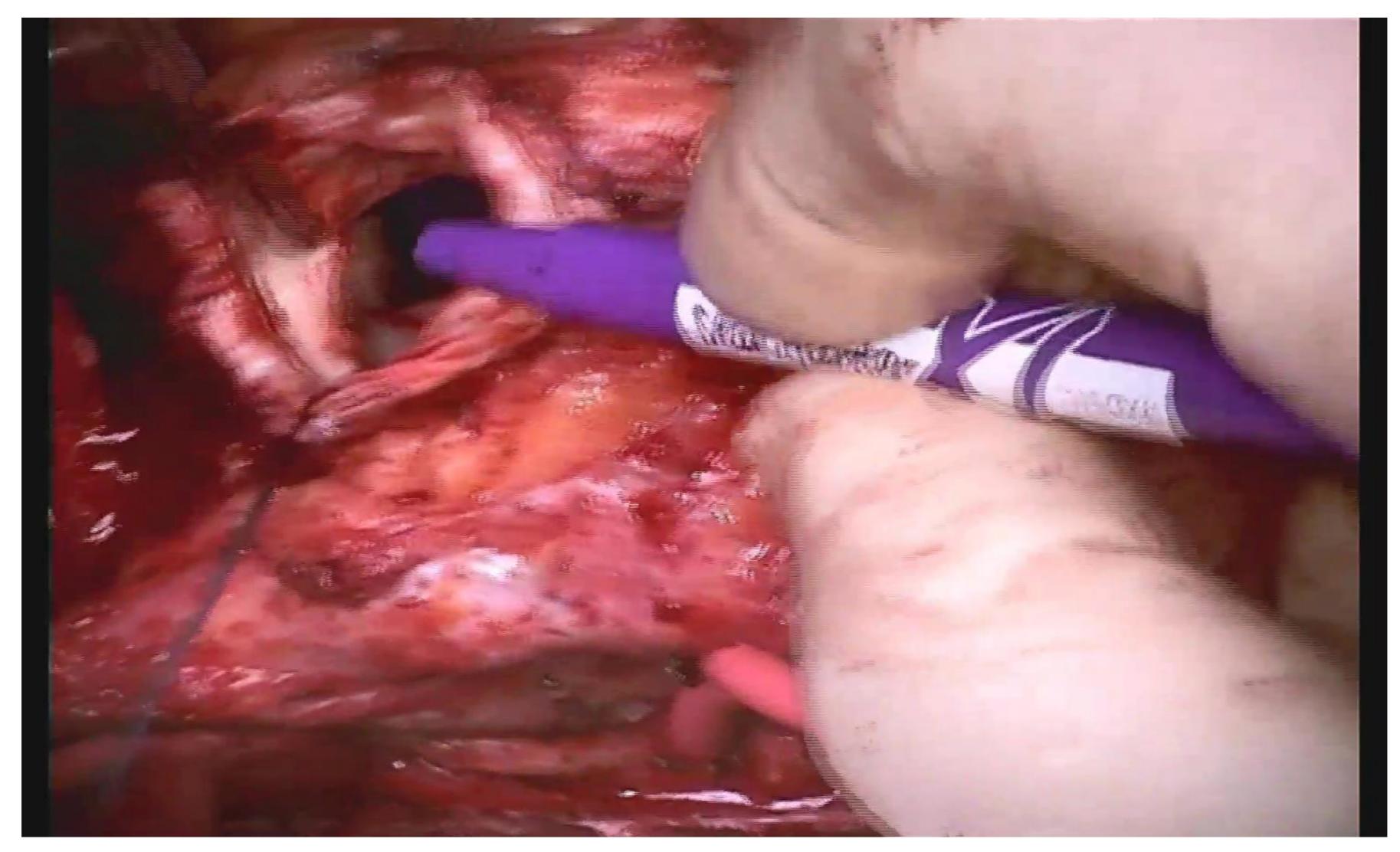




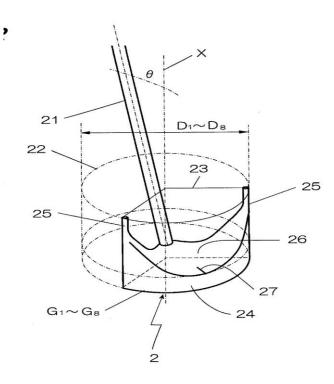
### Inspection and Resection



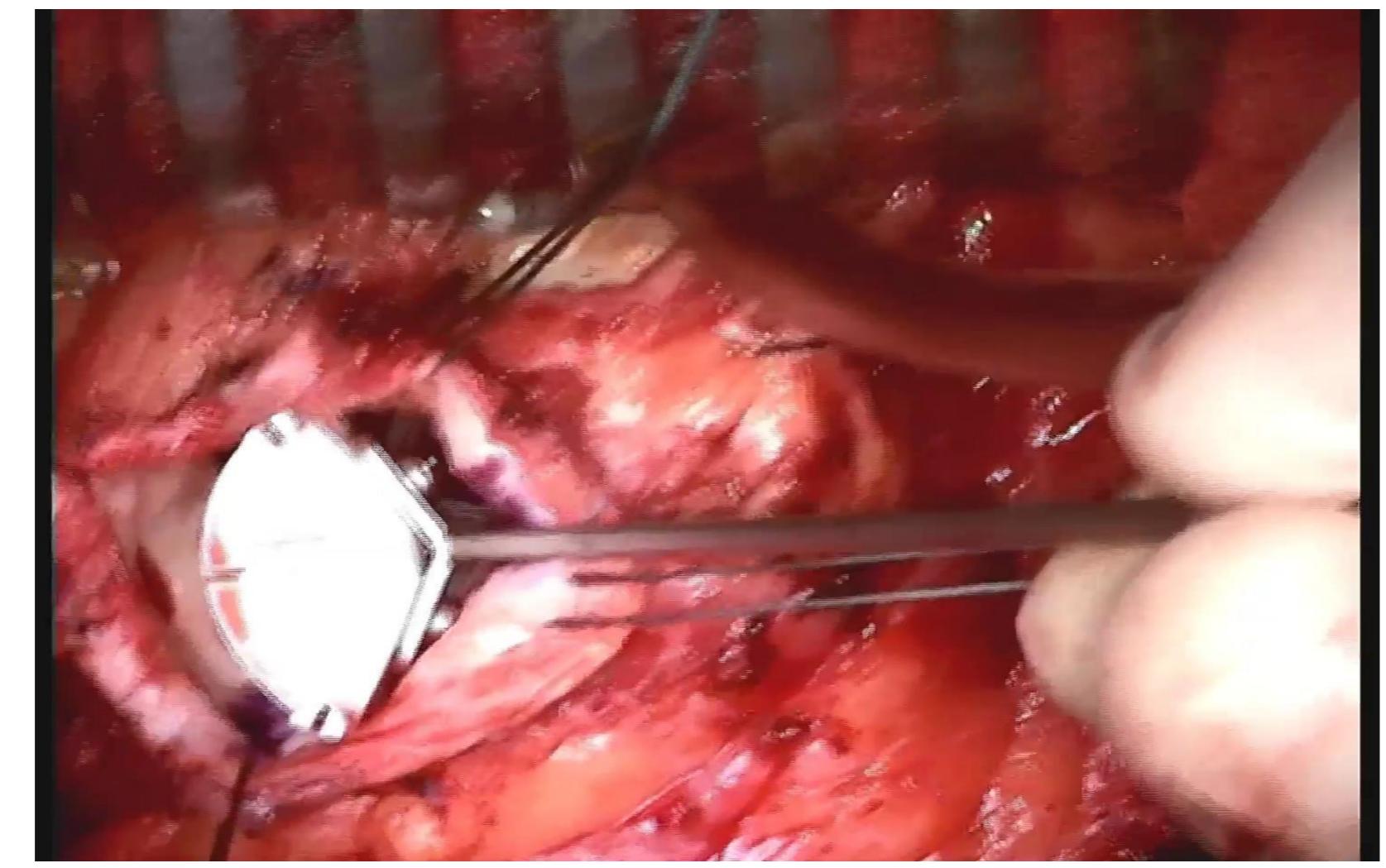
## Marking Commissures

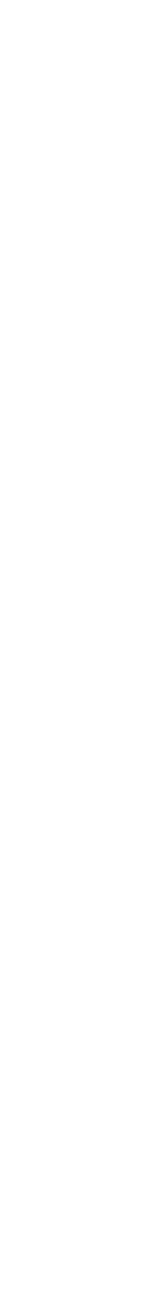


# Sizing Valve Leaflets

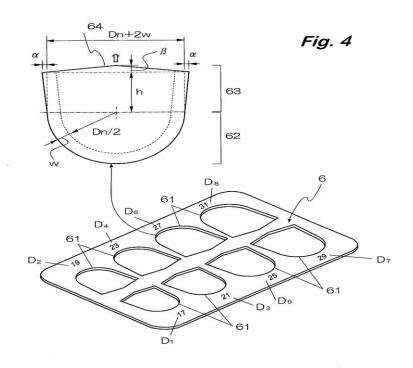


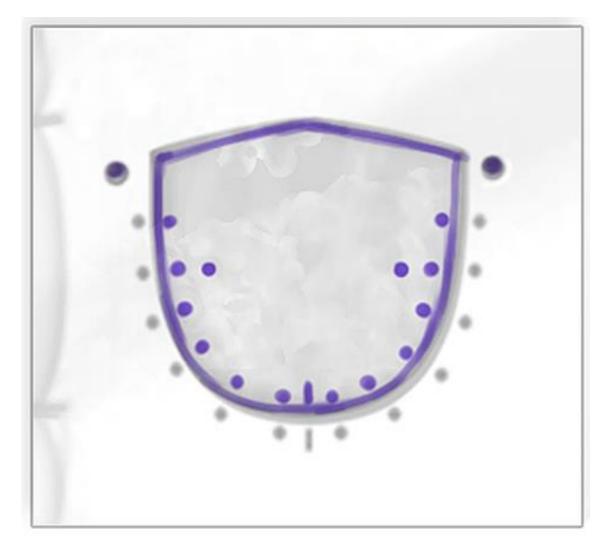


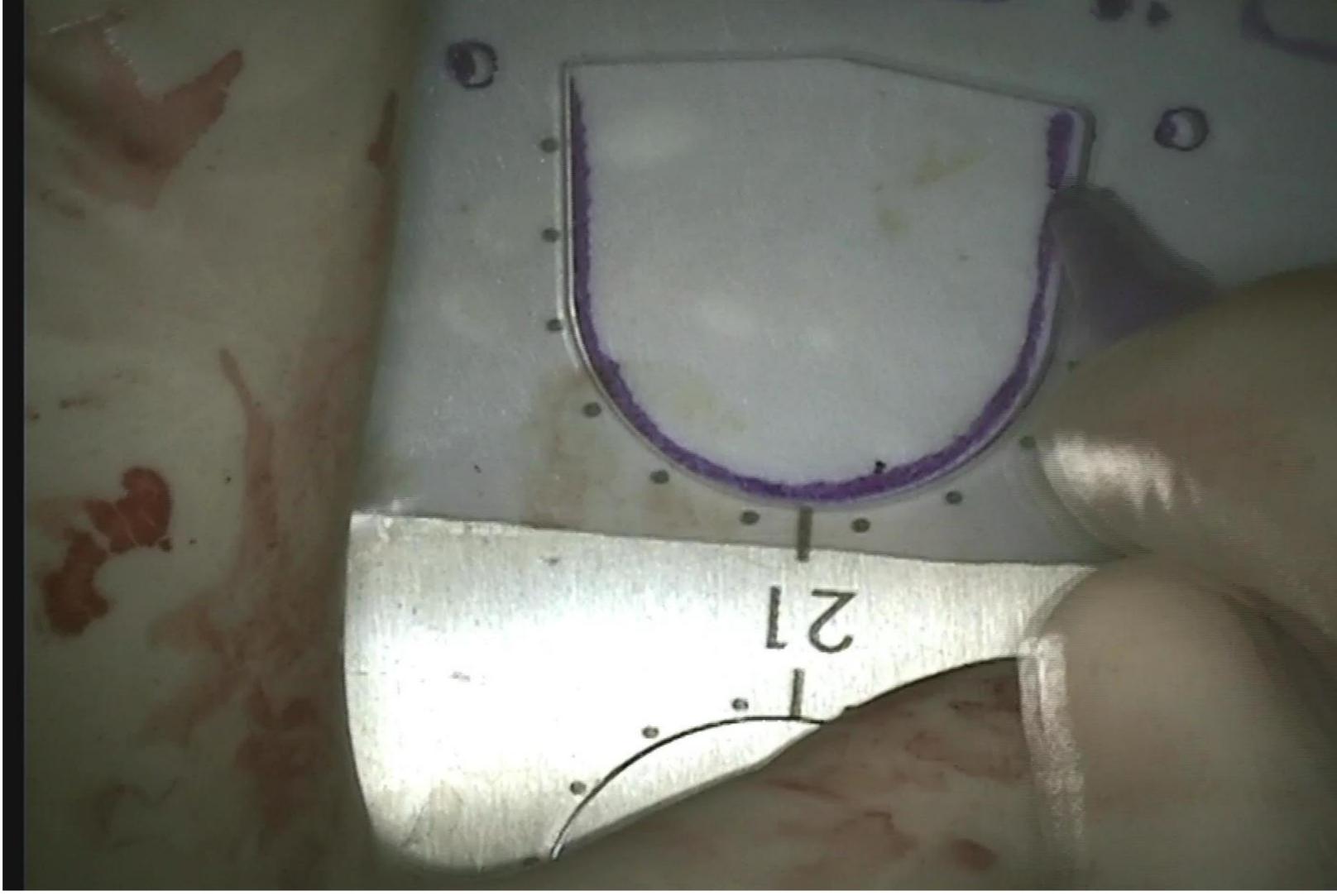


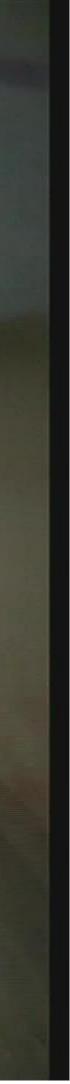


# Marking Templates

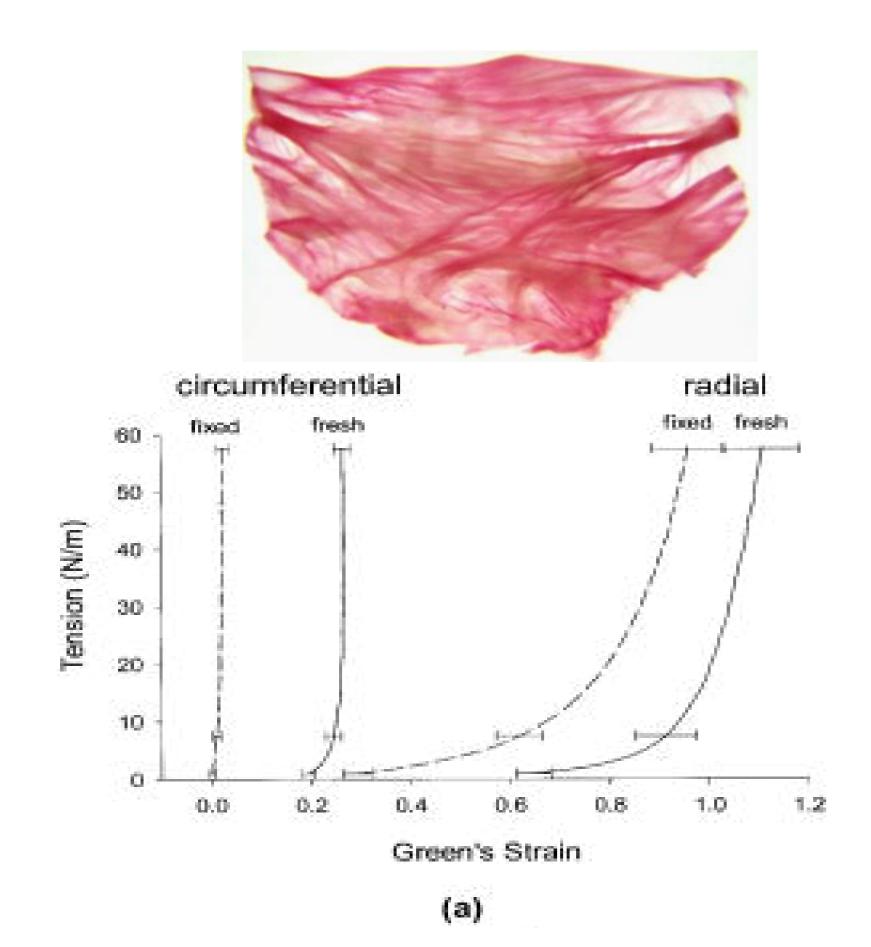








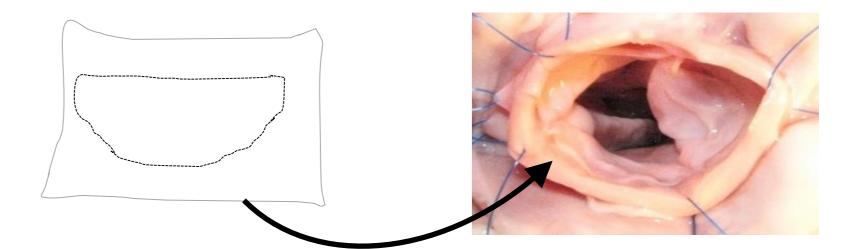
#### Tissue substitute material



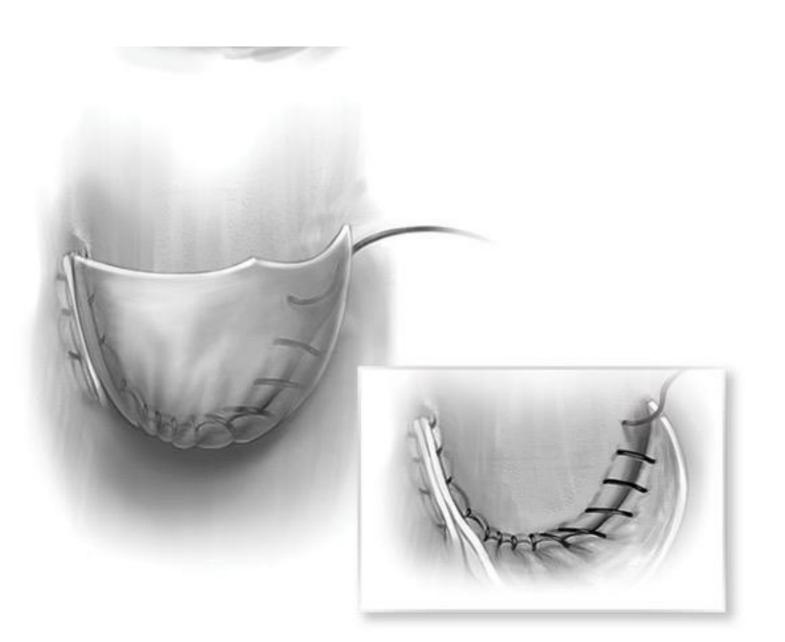
Billiar et al. J Biomech Eng. 2000 Feb;122(1):23-30

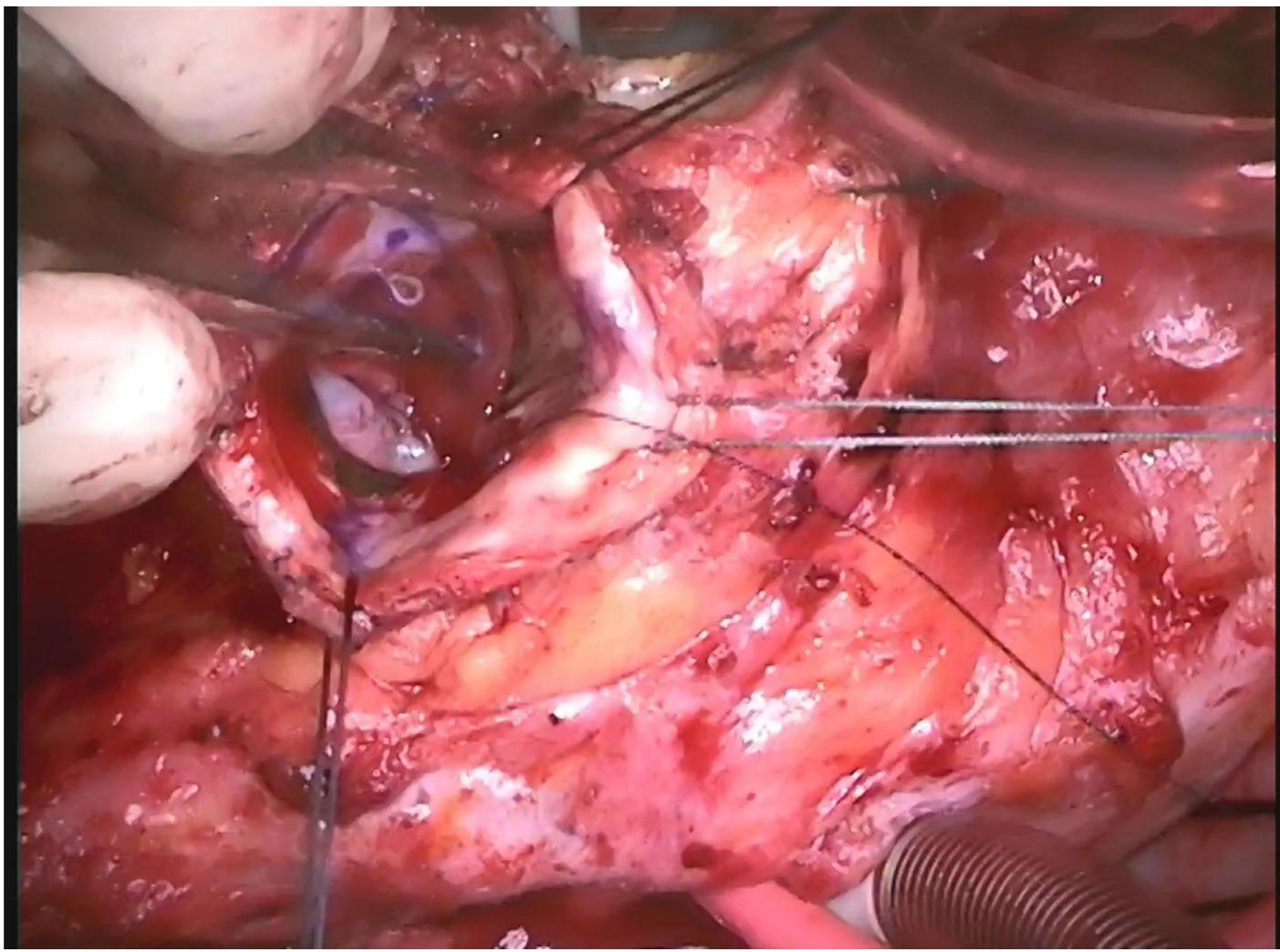


#### Pericardium



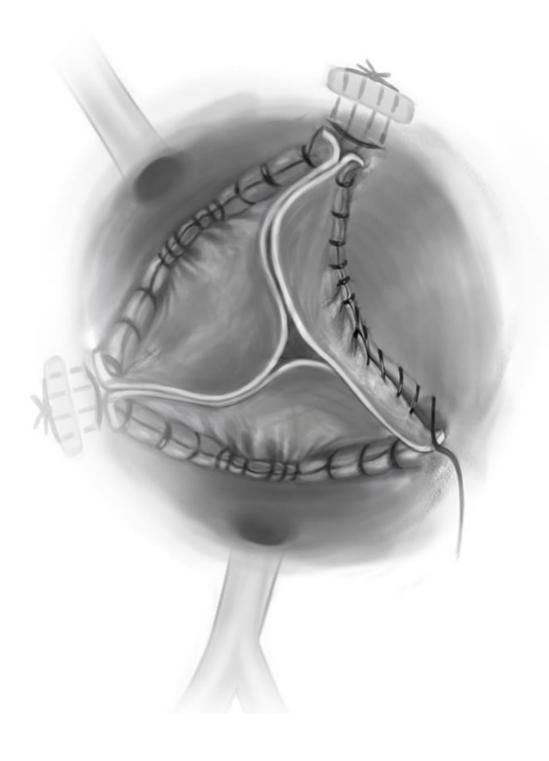
### Suturing 1<sup>st</sup> leaflet

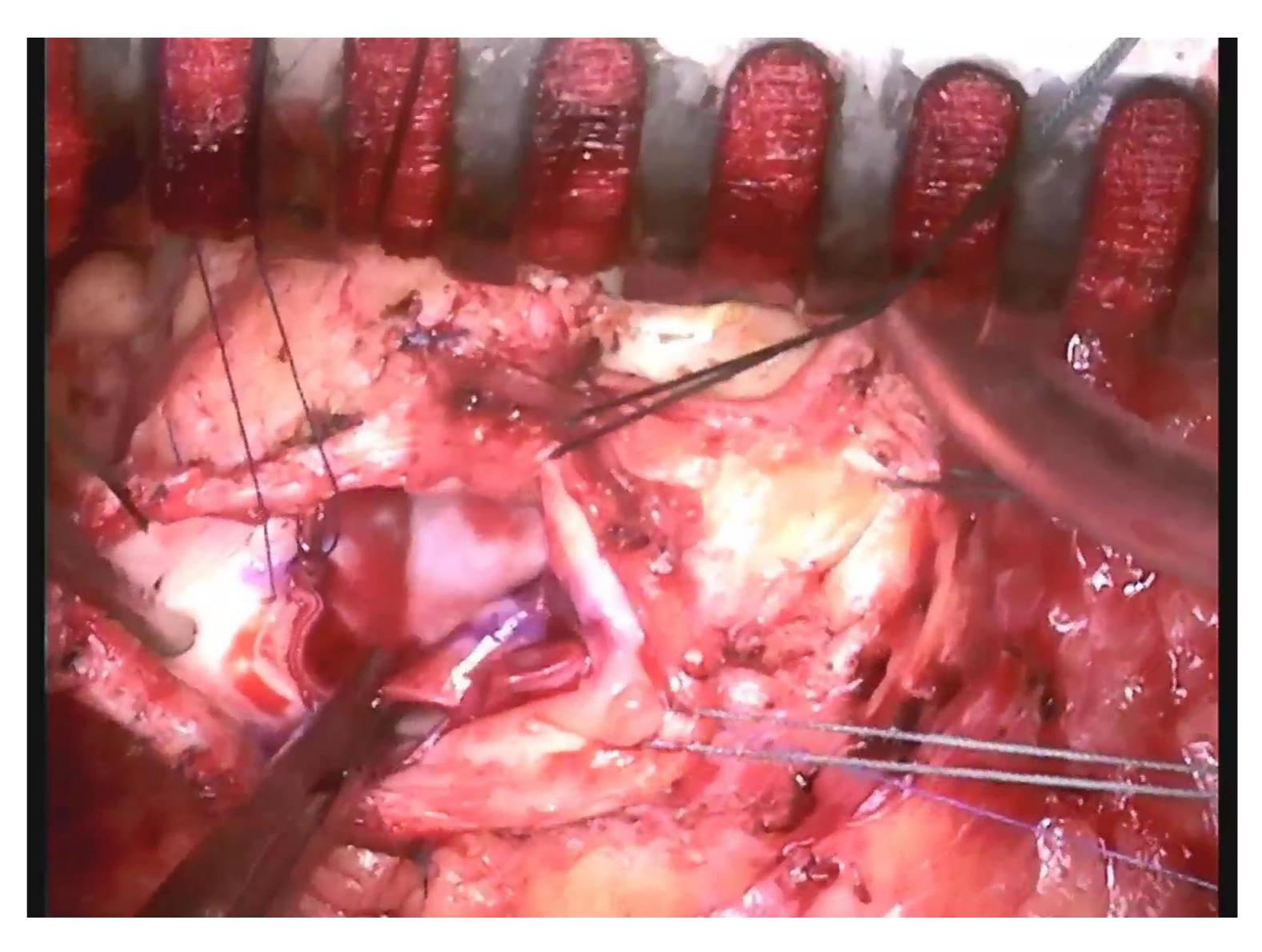


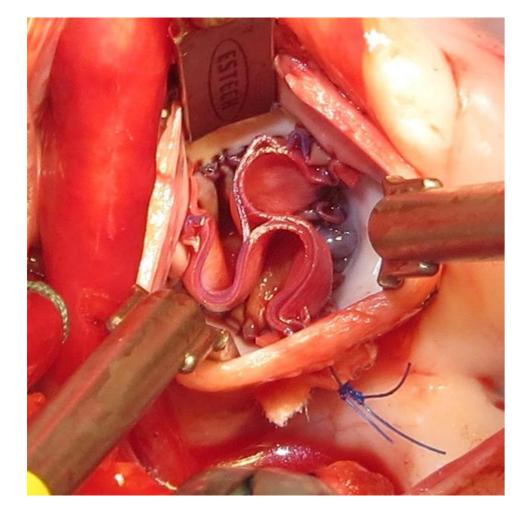


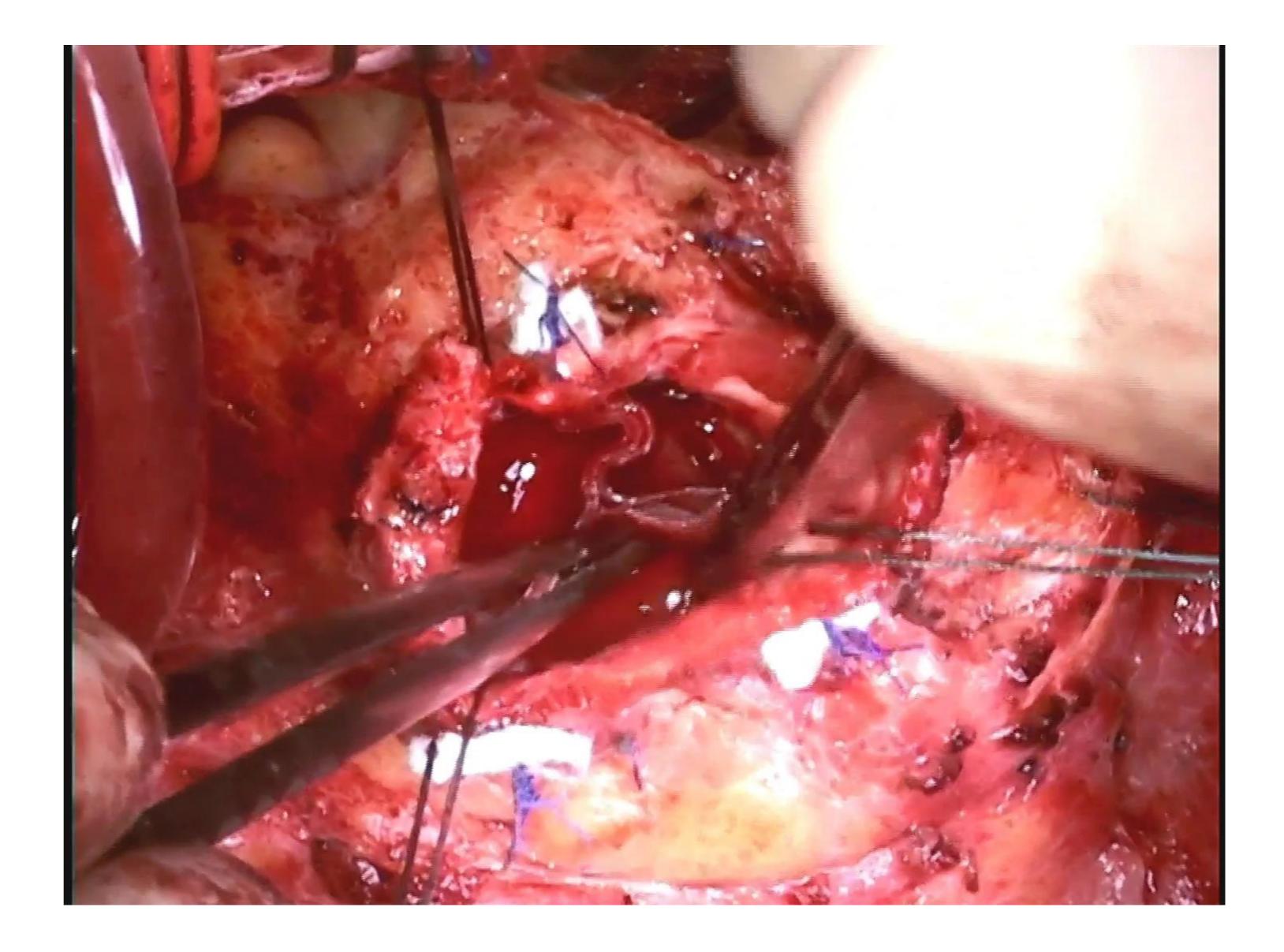


### Second leaflet

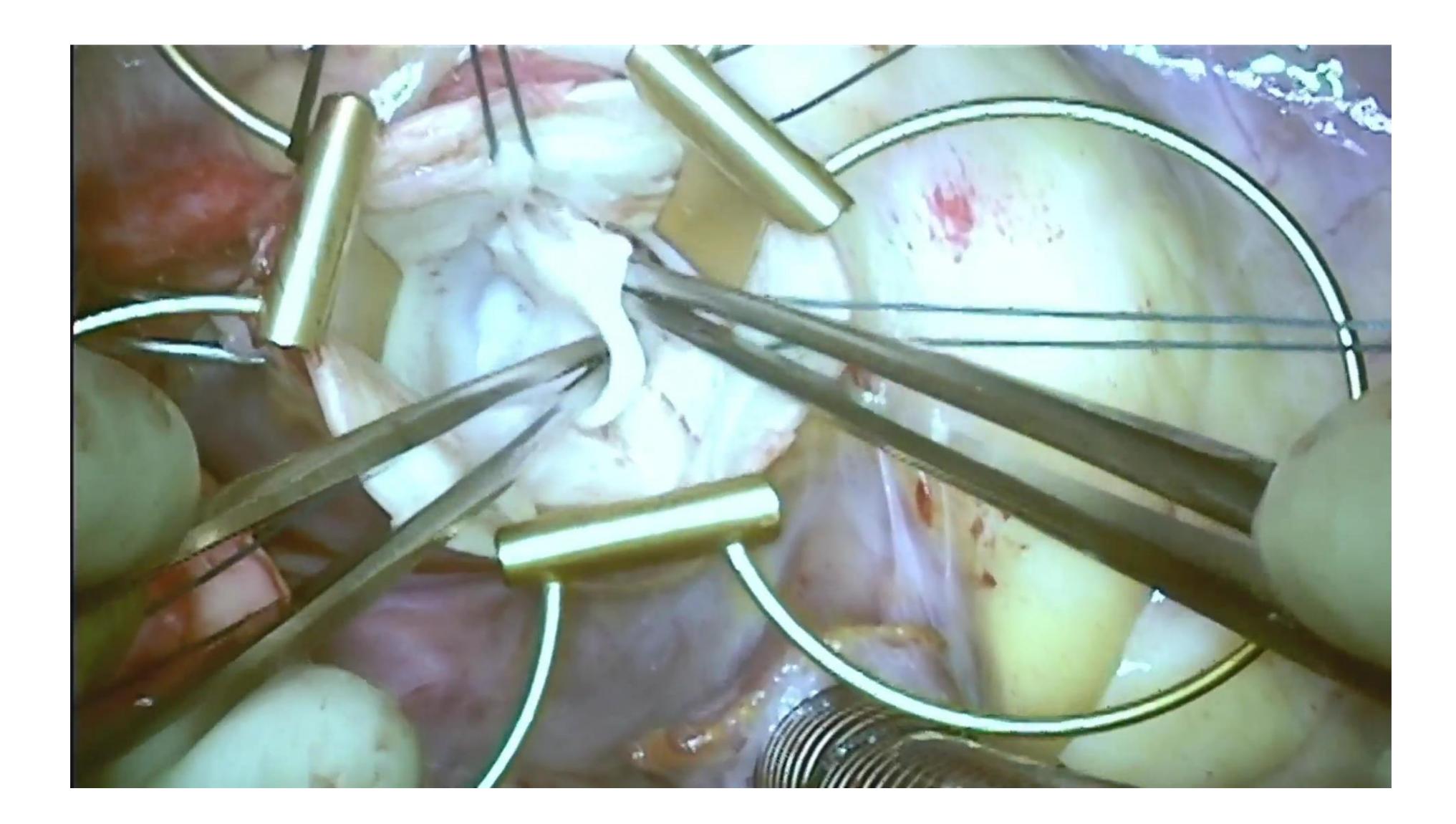




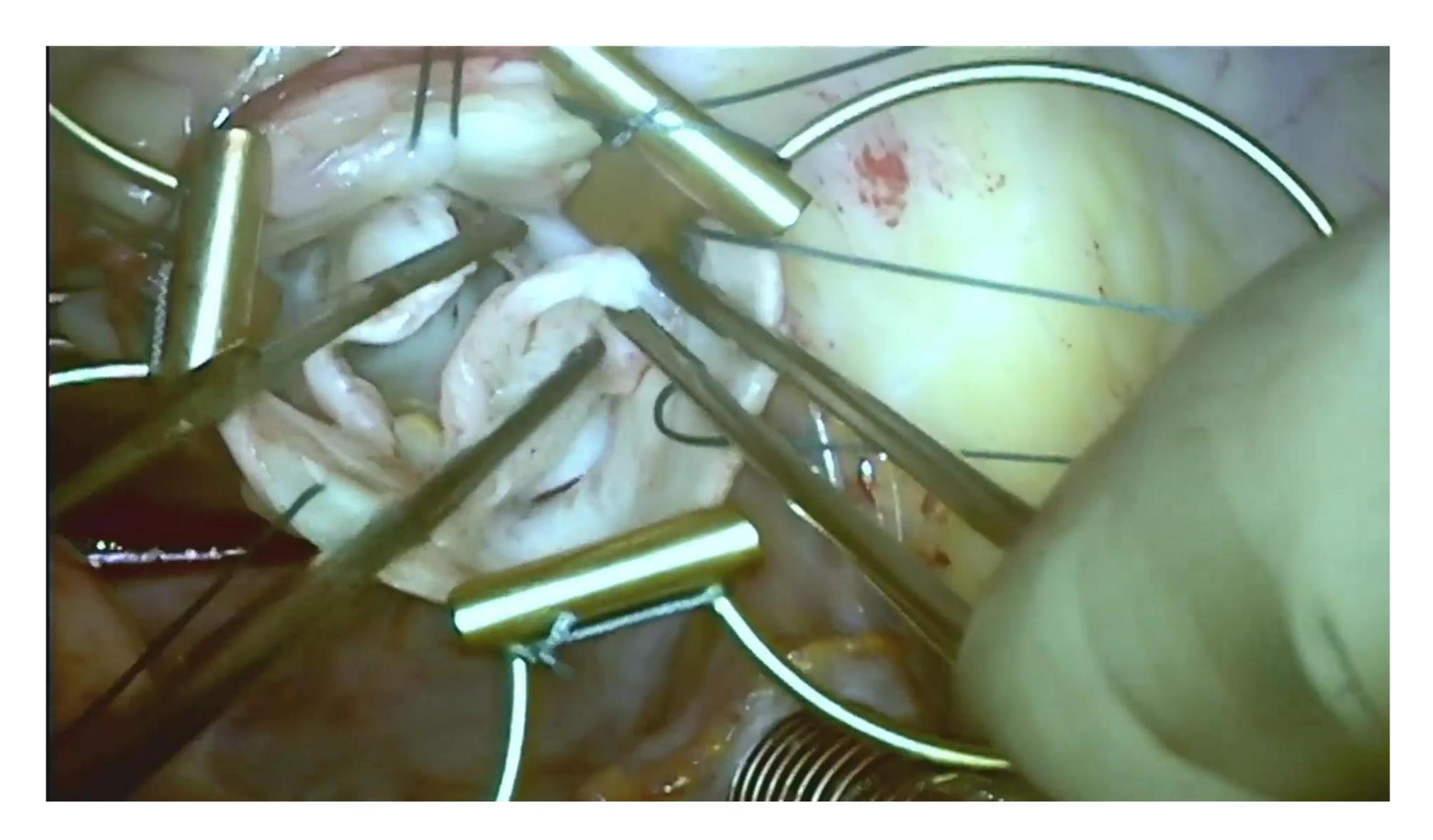




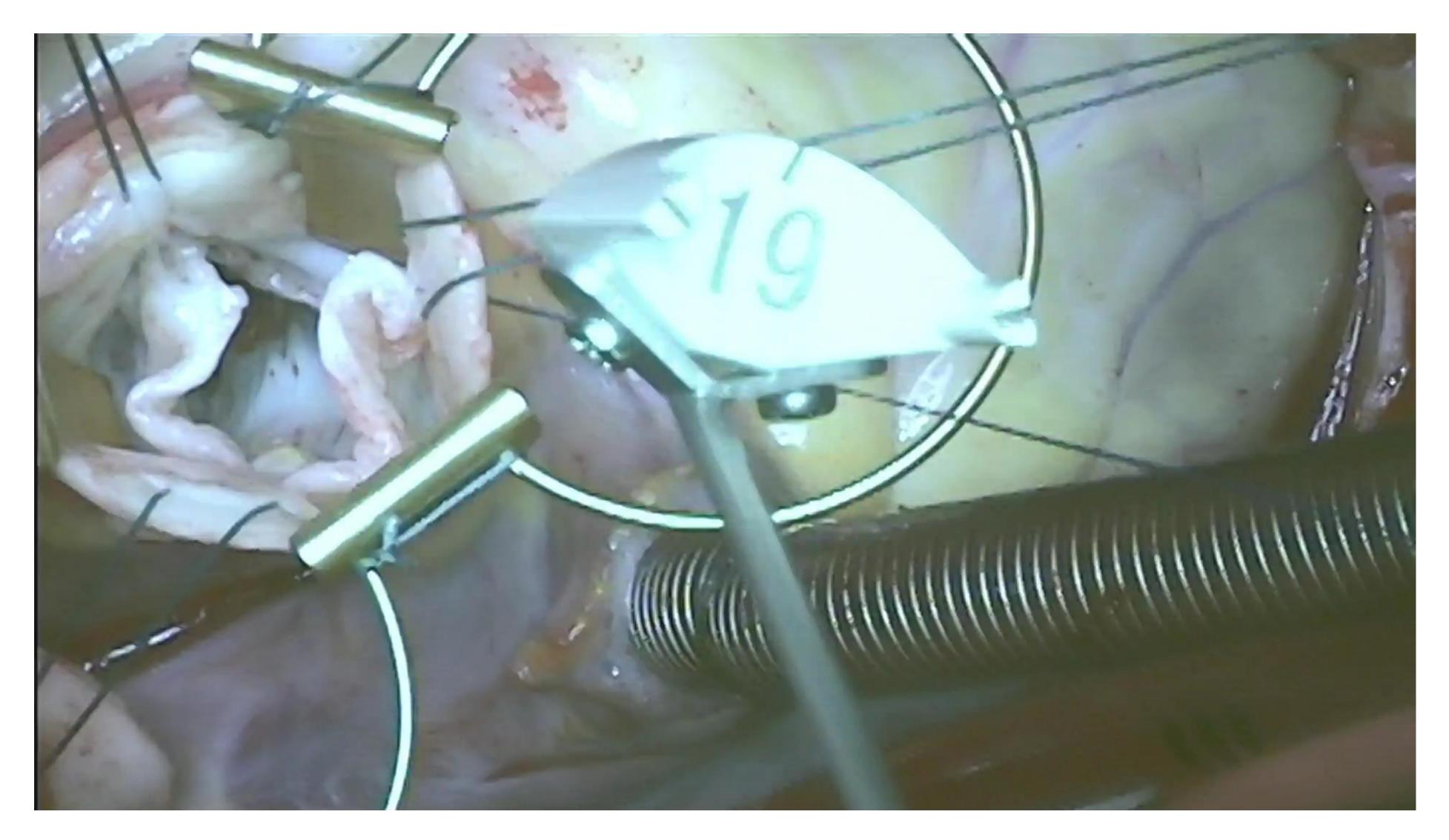
### Single leaflet tear

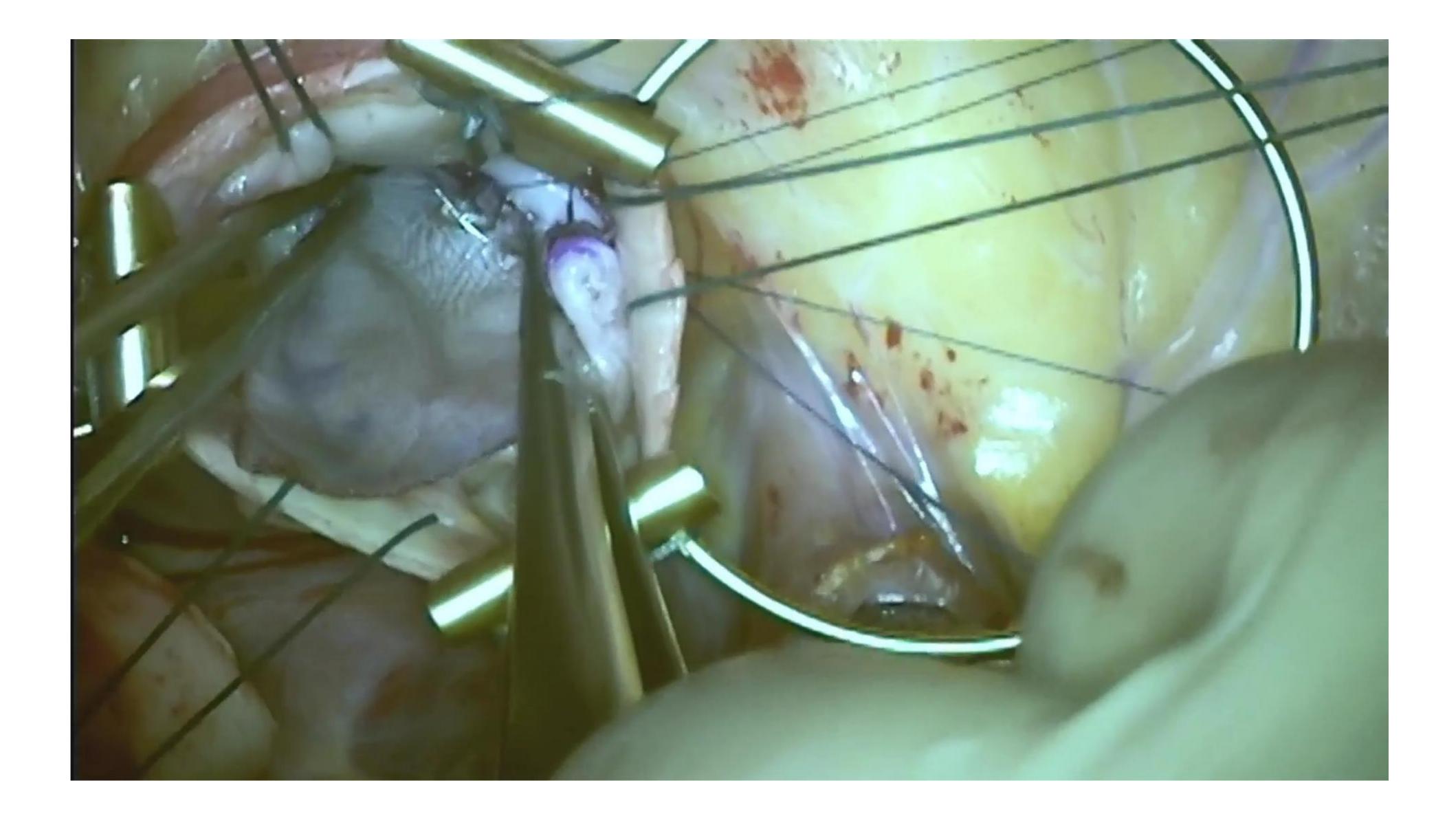


### Suspending Non-coronary Leaflet



## Sizing Anterior Leaflet

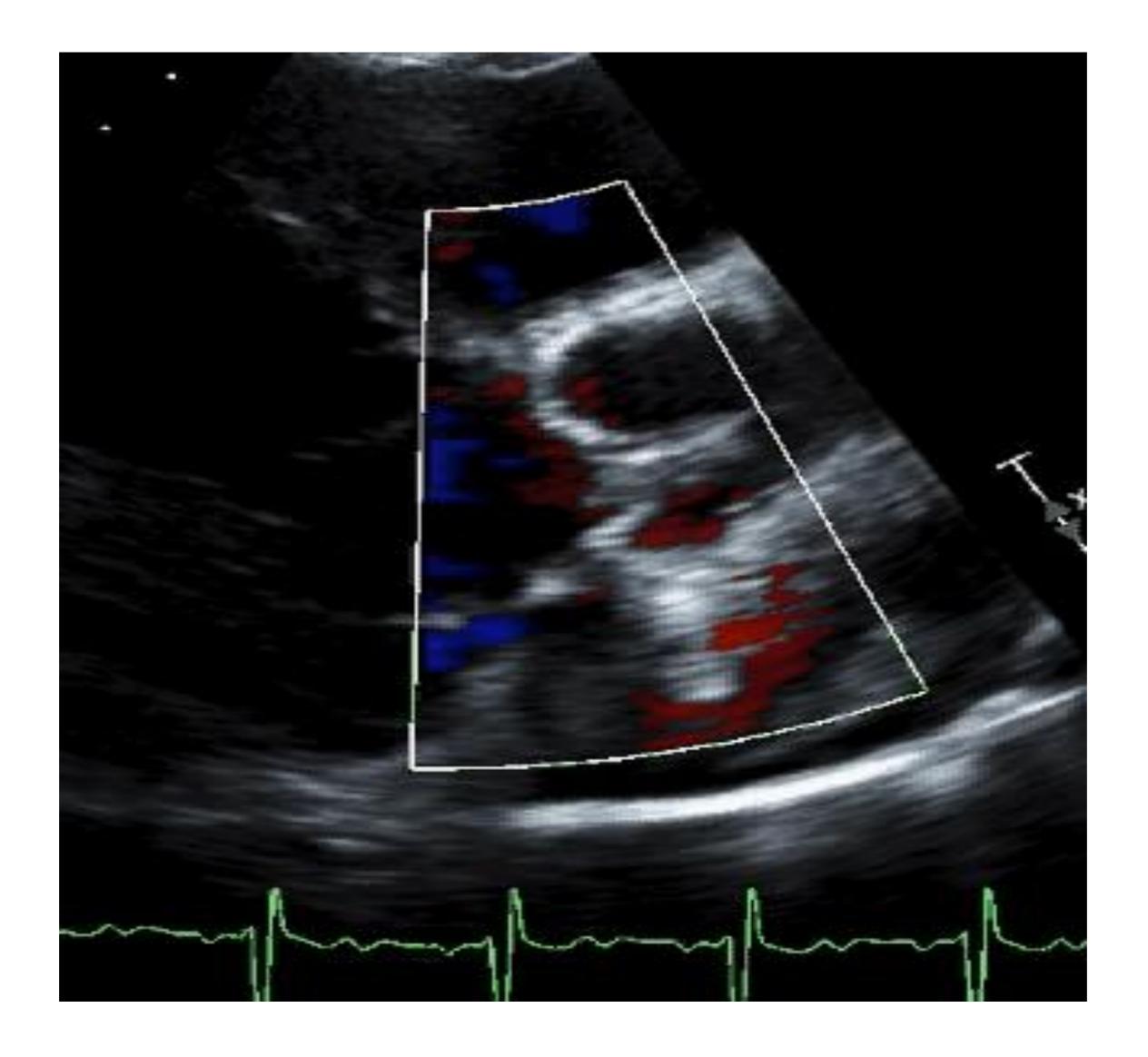




# Final Inspection and Trimming



### **Post-operative Echo**



#### Root enlargement- Konno and Manougian procedures

