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GUVERNUL ROMÂNIEI



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POSDRU 2007-2013



Instrumente Structurale
2007-2013



GUVERNUL ROMÂNIEI
MINISTERUL MUNCII, FAMILIEI,
PROTECȚIEI SOCIALE
ȘI PERSOANELOR VÂRSTNICE
OIRPOSDRU REGIUNEA CENTRU



UNIVERSITATEA DE MEDICINĂ ȘI
FARMACIE "CAROL DAVILA"
BUCUREȘTI

AD-COR Program inovativ de formare in domeniul cardiologiei pediatrice POSDRU/179/3.2/S/152012

Data: 12-10-2015

MODUL TEORETIC

LE PATOLOGIE DELLA VIA D'USCITA DEL VENTRICOLO SINISTRO: INDICAZIONI E SOLUZIONI CHIRURGICHE

Imputernicit: Prof. Dr. Tammam Youssef

Activitate prestata de I.R.C.C.S. POLICLINICO SAN DONATO – MILANO, ITALIA in baza contractului nr.
18/22144/29.07.2015



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Acest material a fost documentat/ validat/ prezentat la sesiunile de formare în cadrul proiectului „AD-COR Program inovativ de formare în domeniul cardiologiei pediatrice” - POSDRU/179/3.2/S/152012, proiect cofinanțat din Fondul Social Operațional Sectorial Dezvoltarea Resurselor Umane 2007-2013.

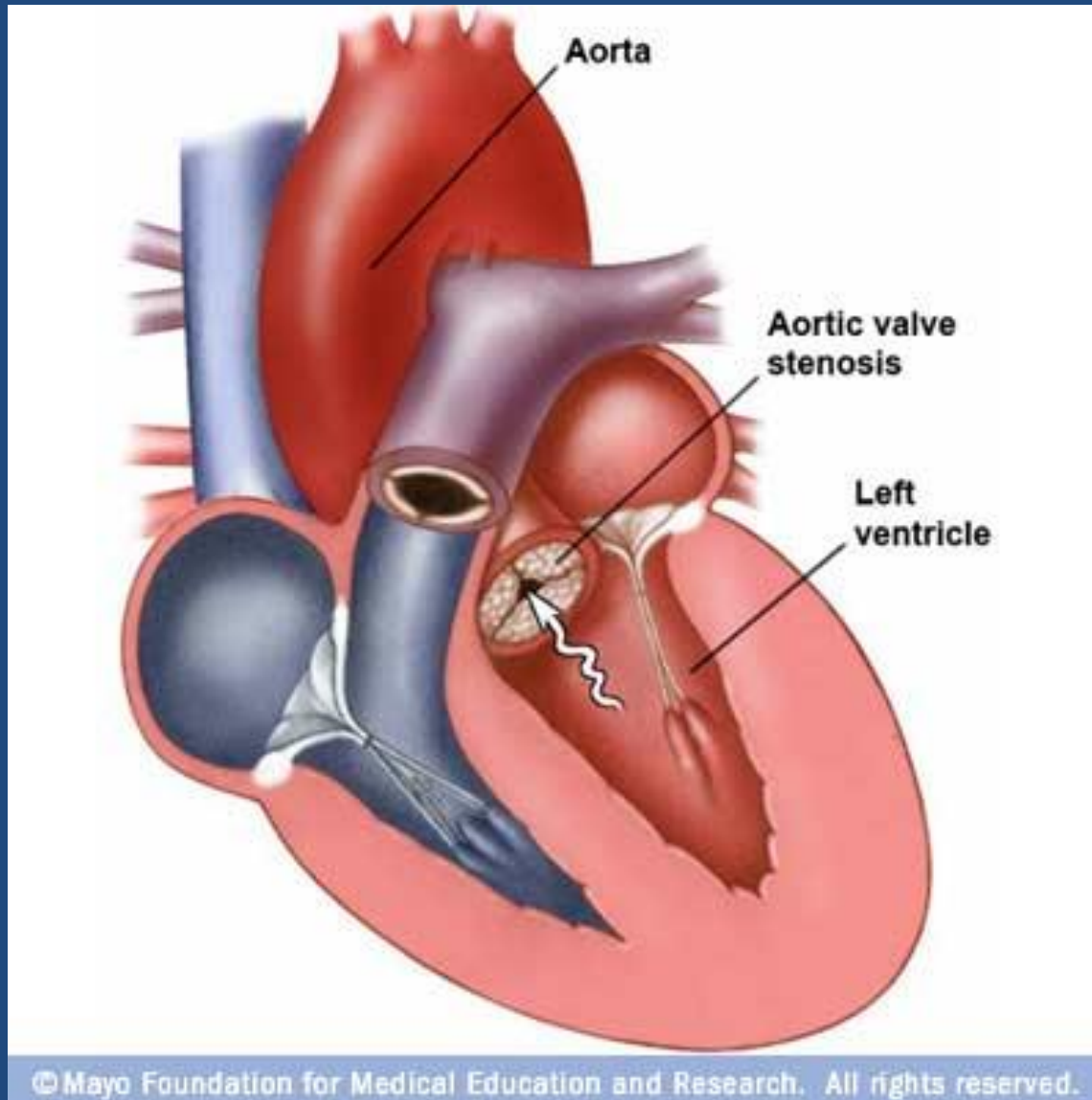
Beneficiar: Universitatea de Medicină și Farmacie „Carol Davila” București

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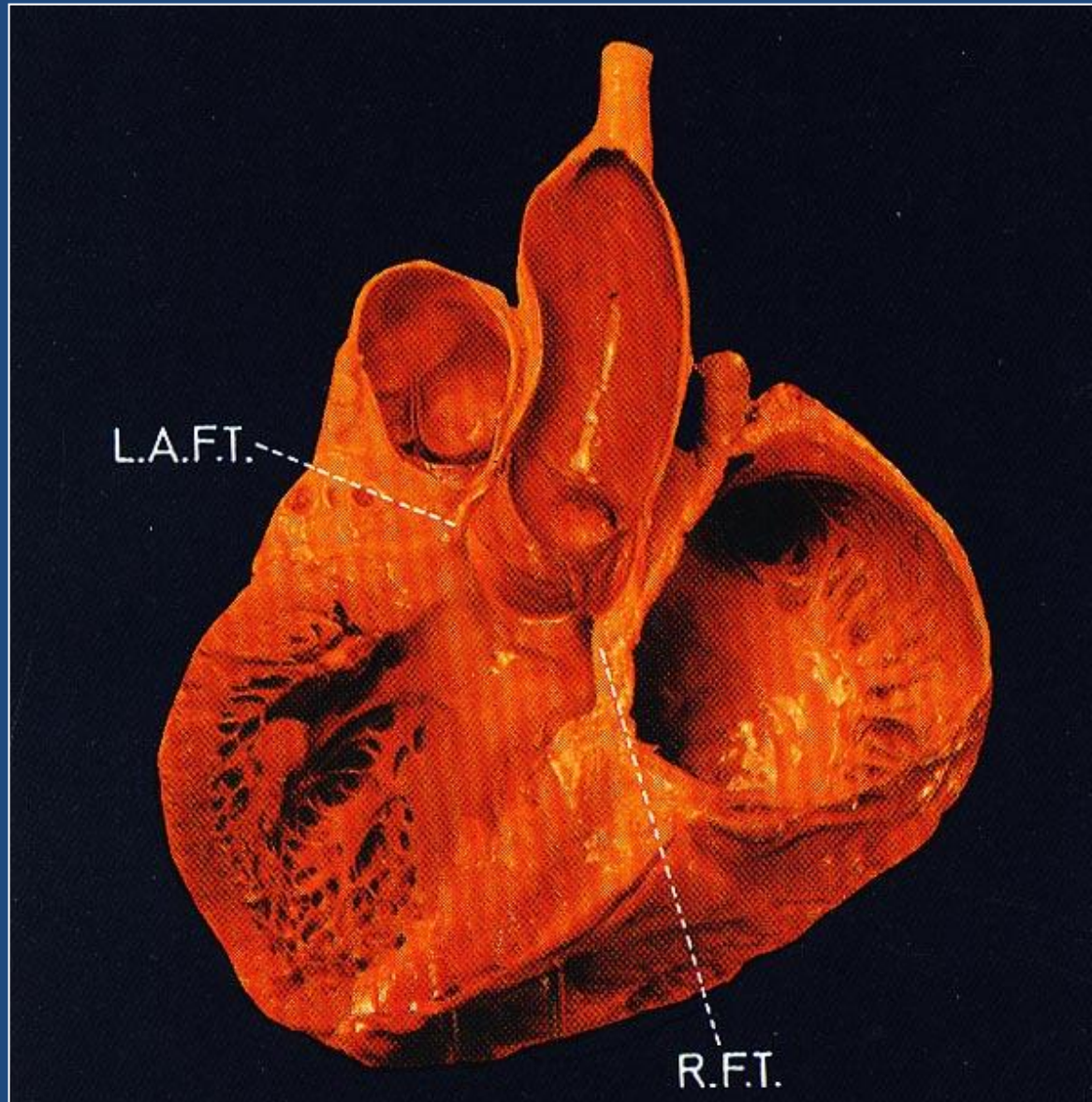
LE PATOLOGIE DELLA VIA D'USCITA DEL VENTRICOLO SINISTRO: INDICAZIONI E SOLUZIONI CHIRURGICHE

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Alessandro Frigiola MD.
I.R.C.C.S. Policlinico San Donato
Milano - Italia

Cuore normale



Anatomia dell'aorta



Patologia della via d'uscita del cuore sx

Ostruzioni

- ✓ Stenosi sottovalvolare Aortica (incluso tunnel)
- ✓ Miocardiopatia ipertrofica ostruttiva
- ✓ SAM
- ✓ Stenosi Aortica (incluse varie forme con ipoplasia anello)
- ✓ Stenosi sopravalvolare aortica

Patologia della via d'uscita del cuore sx

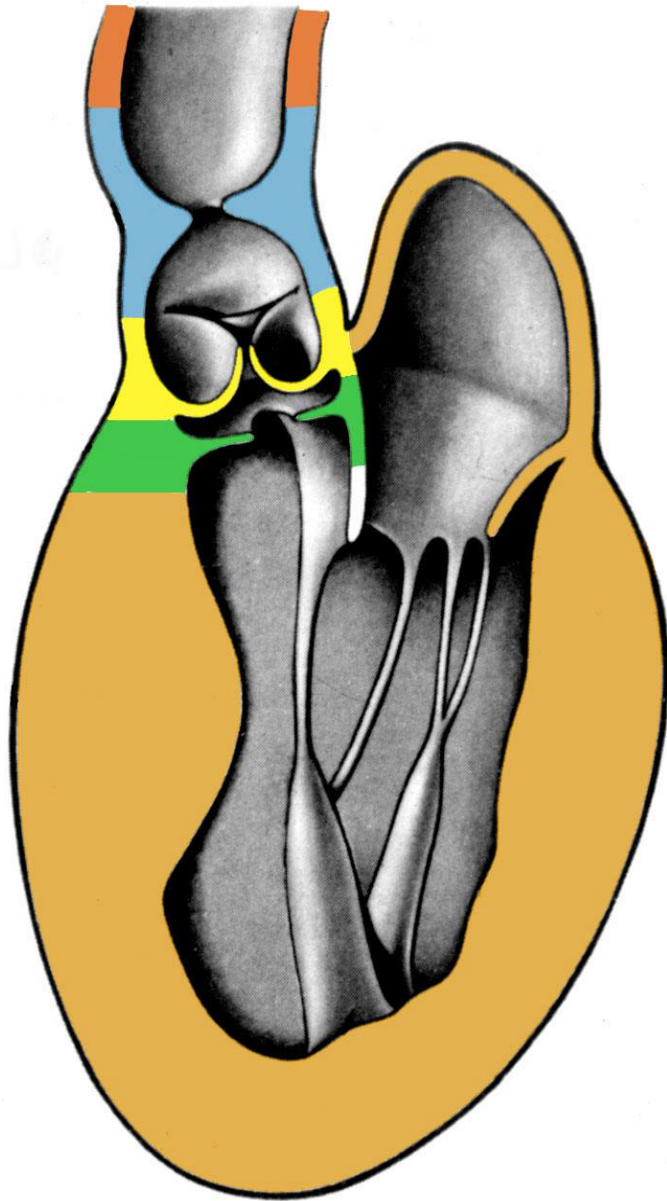
Ostruzioni (altre cause rare)

- ✓ Tessuto mitralico accessorio TIPO I : fisso, TIPO II: mobile
- ✓ Anomala inserzione mitrale
- ✓ Anomalia muscoli papillari e corde
- ✓ Spostamento ipertrofia setto interventricolare
(TGA –Atresia Polm a setto intatto)
- ✓ Amiloidosi
- ✓ Ectopia tiroidea

Patologia della via d'uscita del cuore sx

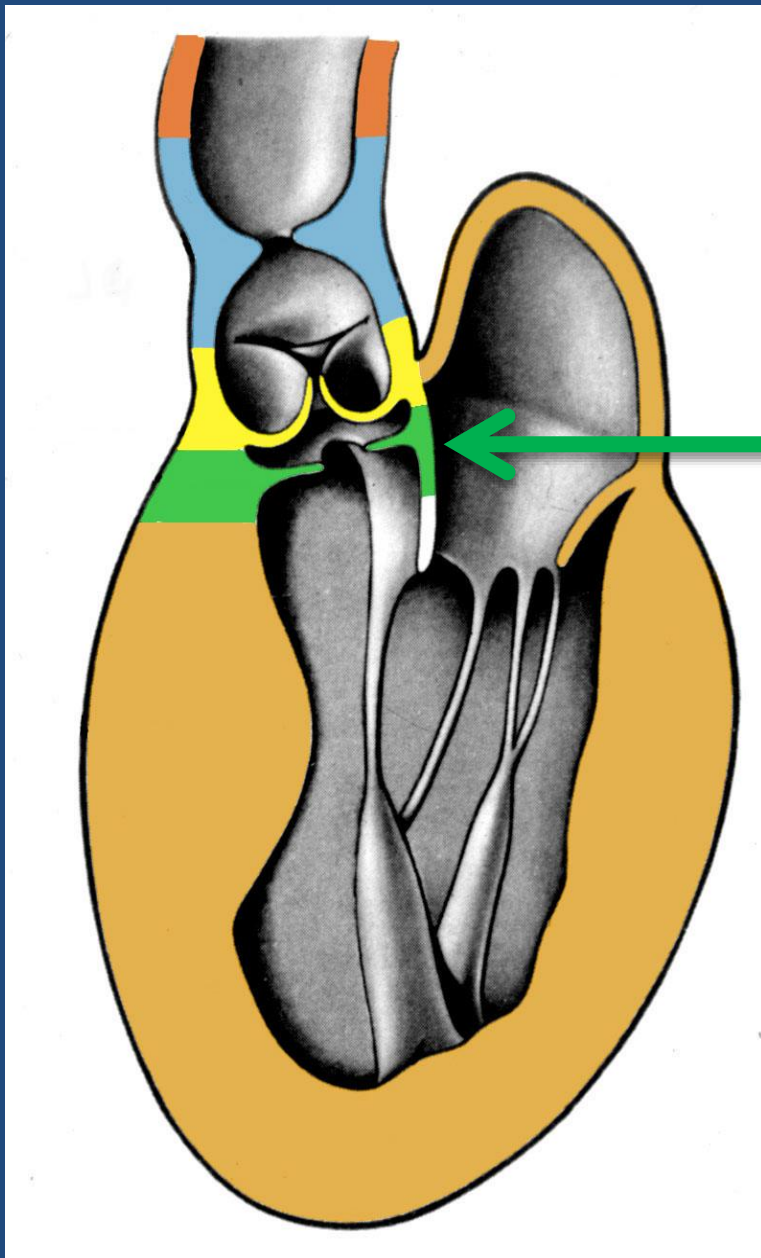
Insufficienze

- ✓ Insufficienza aortica
- ✓ Aneurisma



PATOLOGIE AORTICHE

LIVELLI LESIONE



**STENOSI
SOTTOVALVOLARE
AORTICA**

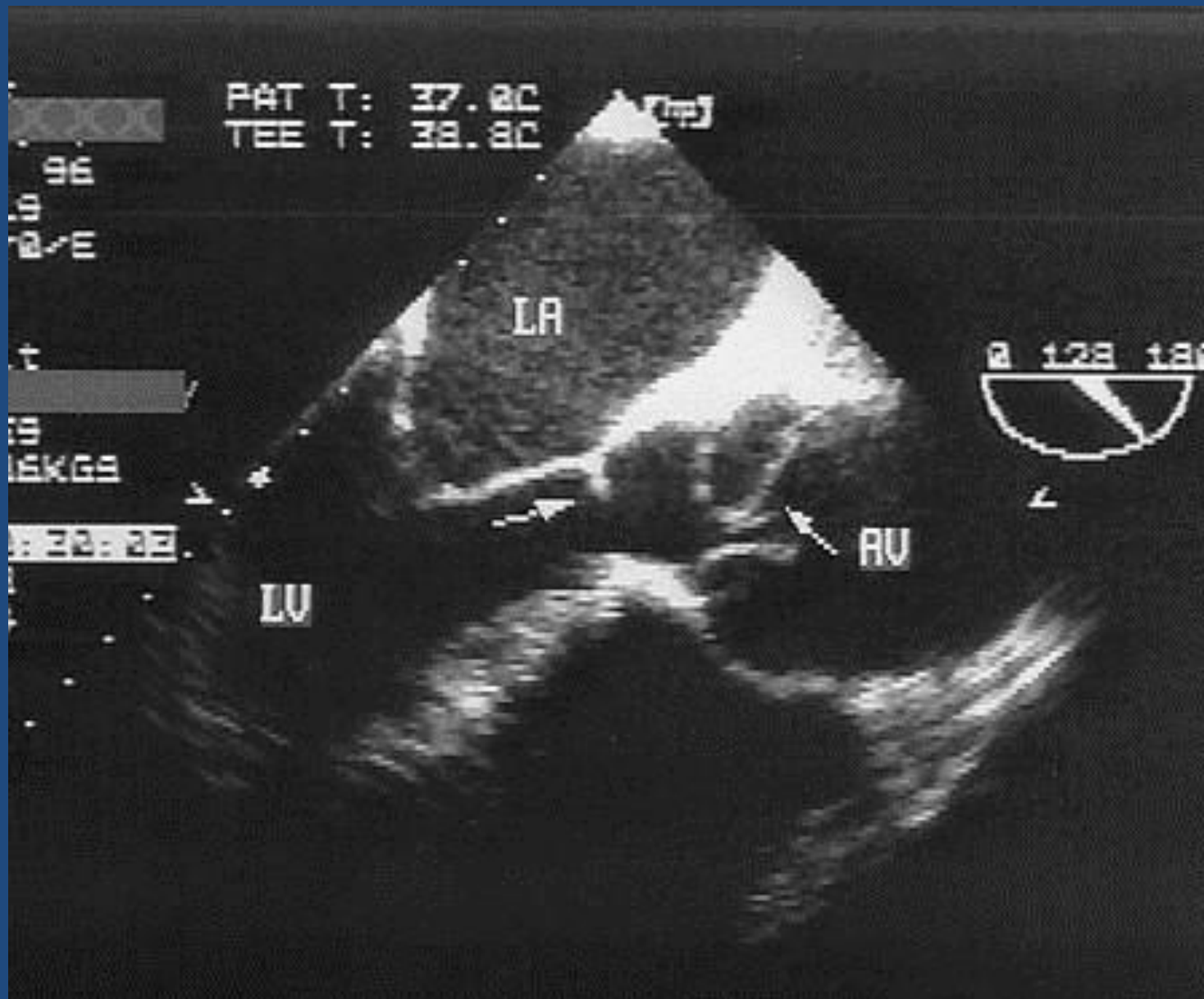
STENOSI SOTTOVALVOLARE AORTICA



STENOSI SOTTOVALVOLARE AORTICA



STENOSI SOTTOVALVOLARE AORTICA



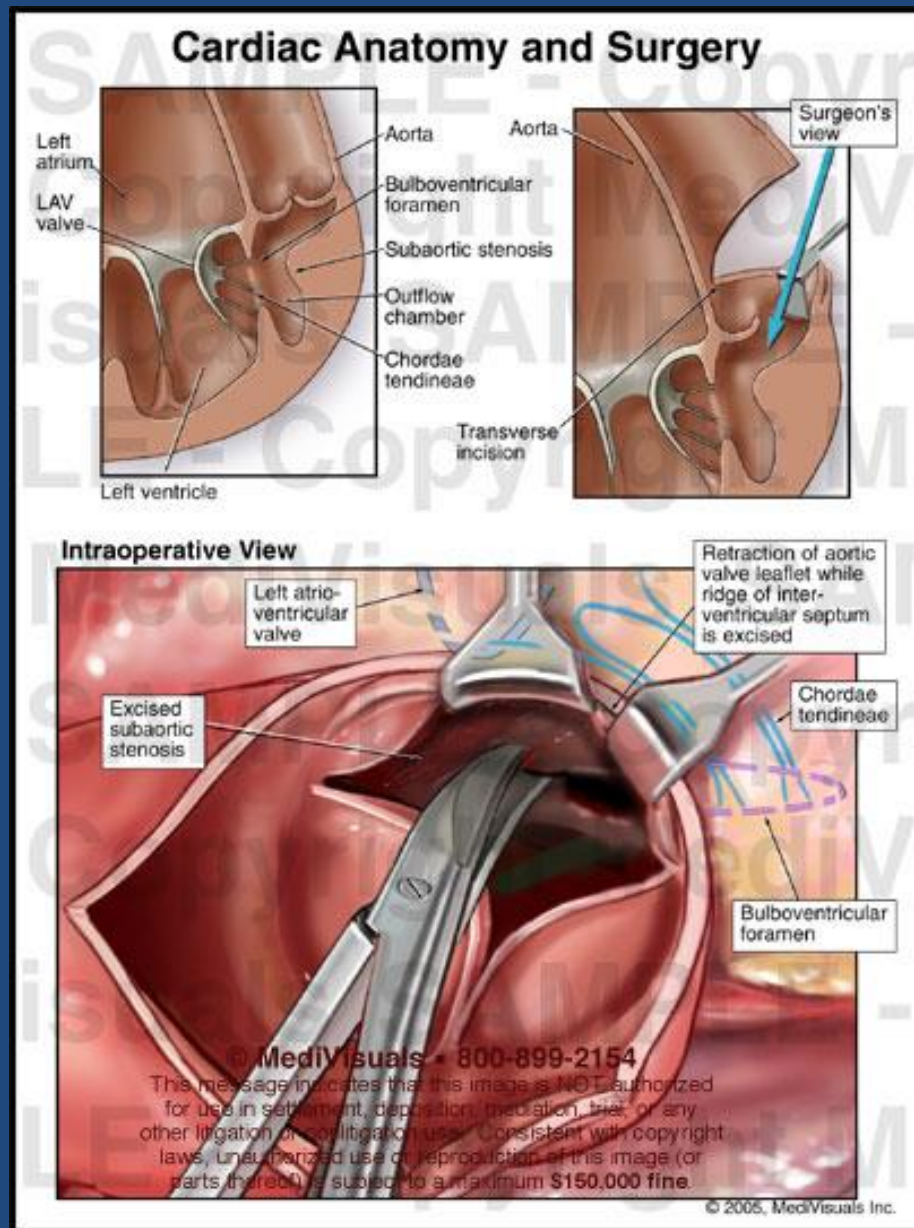
PATOLOGIE VIA D'USCITA VENTRICOLO SINISTRO

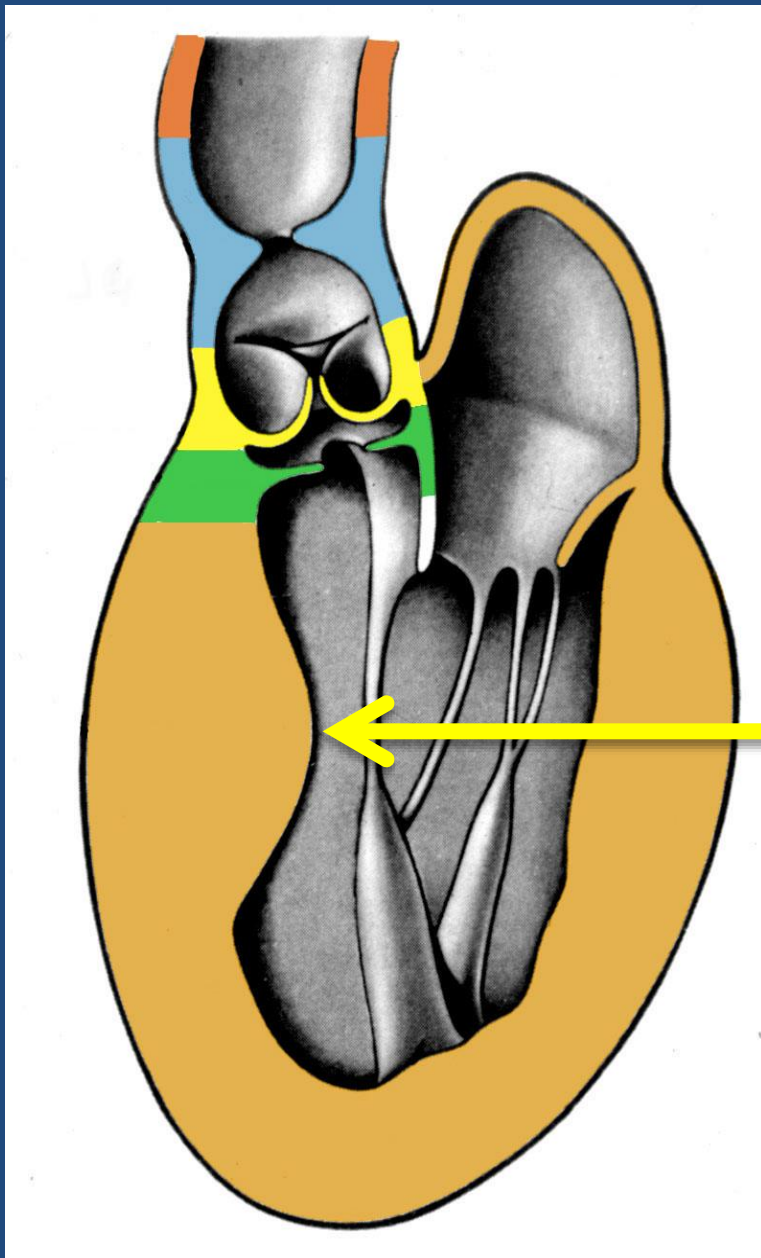
Stenosi sottoaortale aortica

Indicazioni operatorie

- Qualunque gradiente (25-30 mmHG) se presenza LAo
- Gradiente 50 mmHg se non LAo o secondo la morfologia

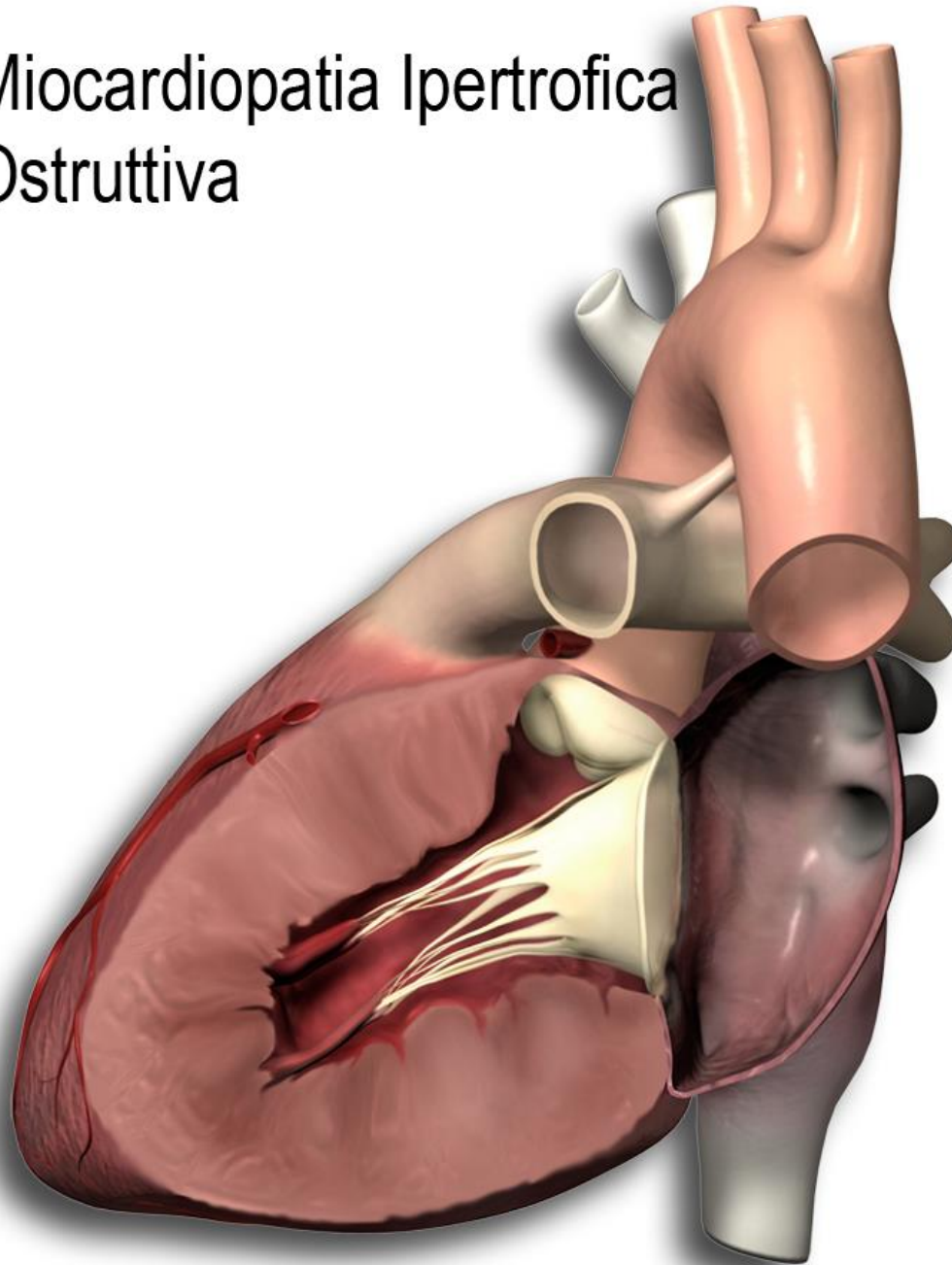
STENOSI SOTTOVALVOLARE AORTICA





**MIOCARDIOPATIA
IPERTROFICA
OSTRUTTIVA**

Miocardipatia Ipertrofica Ostruttiva

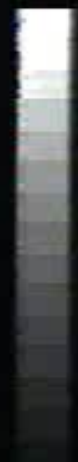


MI: 1.8
S3
15 DIC 84
17:42:21
8/1/E/53
PHILIPS

" S3 "
PRIVITERA
SANTO

03872
GUAD 56
COMP 63

20CM
51HZ



PADILLA SOPHIE,

08 SEP 2010 14:42

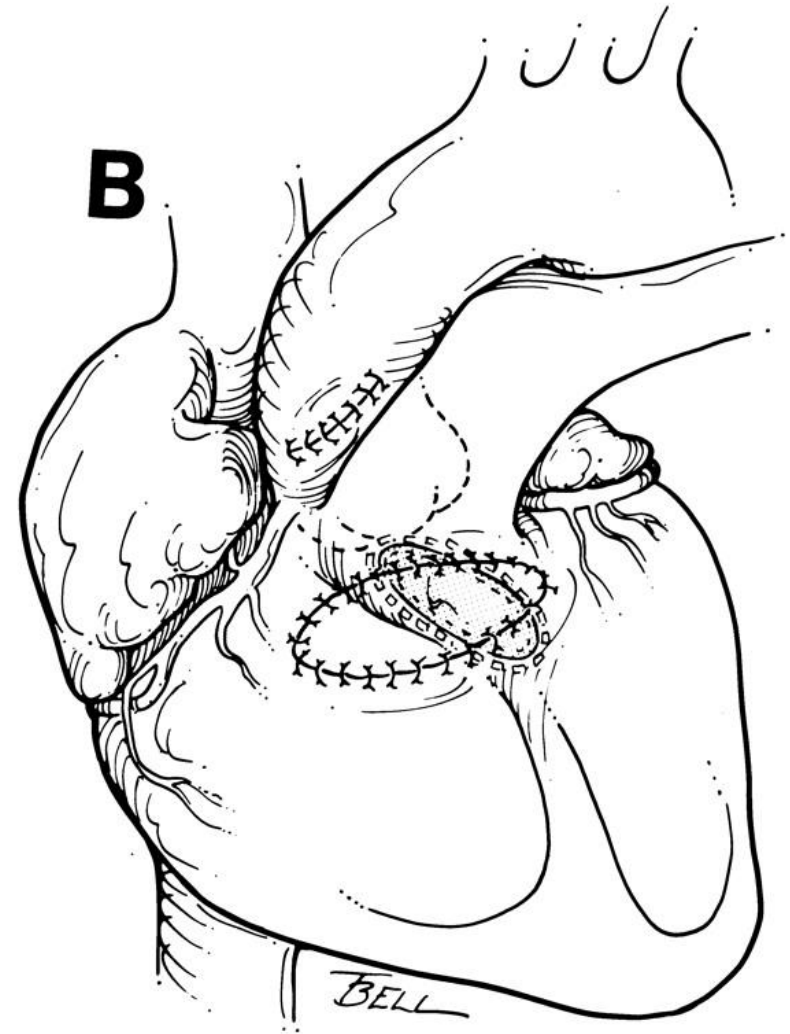
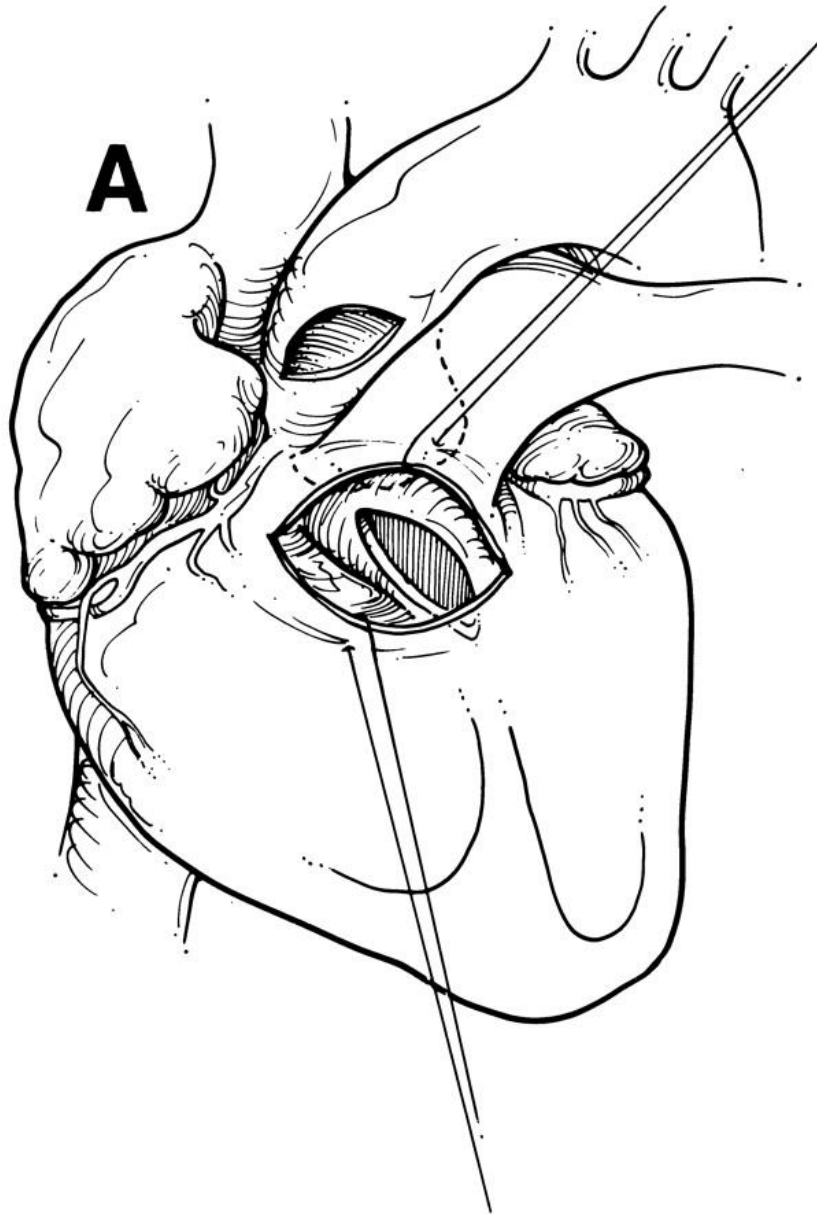
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B	F	G	G	61%	
TEI	D	8	cm	XV	C
	PRC	9-2-L	PRS	A	
	PST	1			

CARDIO 1 PA240



KONNO RASTAN



Miocardipatia Ipertrofica Ostruttiva

Indicazioni Operatorie

- Gradiente max > 80/90 mmHg**
- Insufficienza mitralica da SAM**
- Fallimento terapia medica**

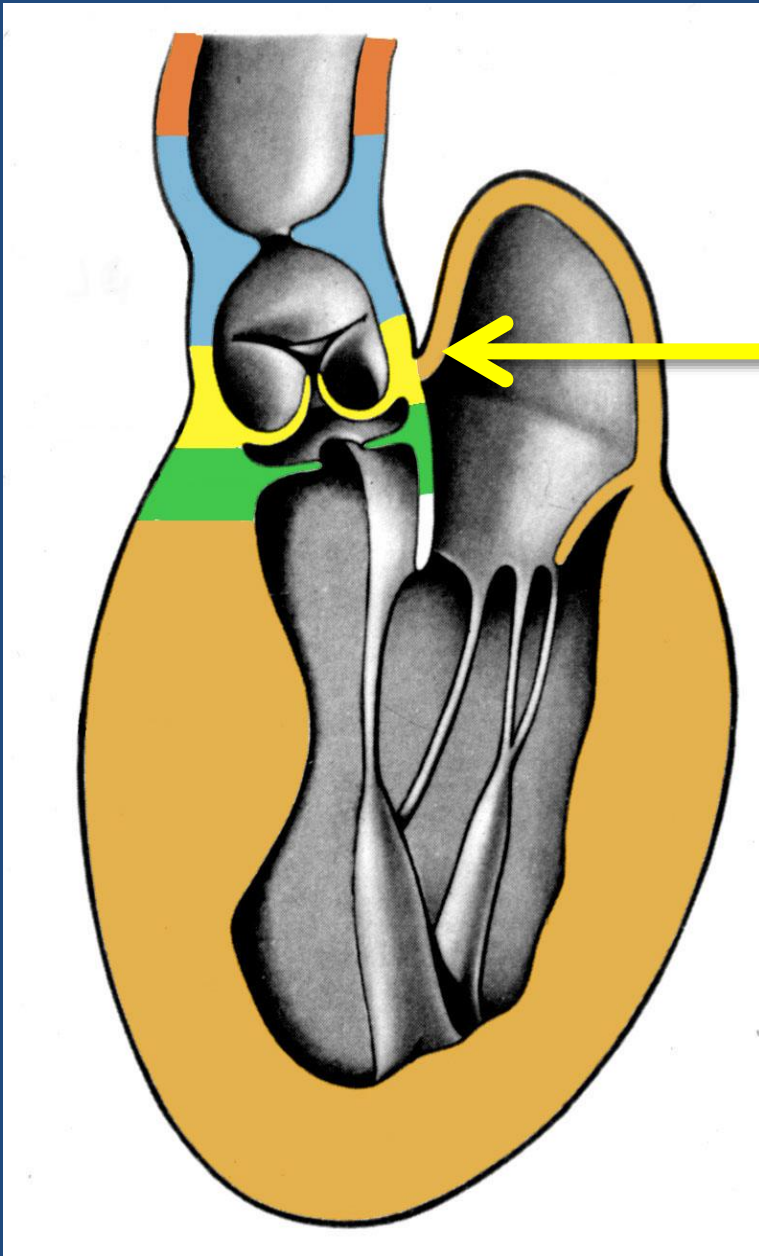
Shöne complex

Series of obstructive or potentially obstructive congenital left-sided cardiac lesions:

- Supravalvular mitral ring
- Parachute deformity of mitral valve
- Subaortic stenosis
- Coarctation of the aorta

STENOSI SOTTOVALVOLARE AORTICA





**STENOSI
AORTICA**

PATOLOGIE VIA D'USCITA VENTRICOLO SINISTRO

Soluzioni terapeutiche

St. Ao: - Valvuloplastica percutanea

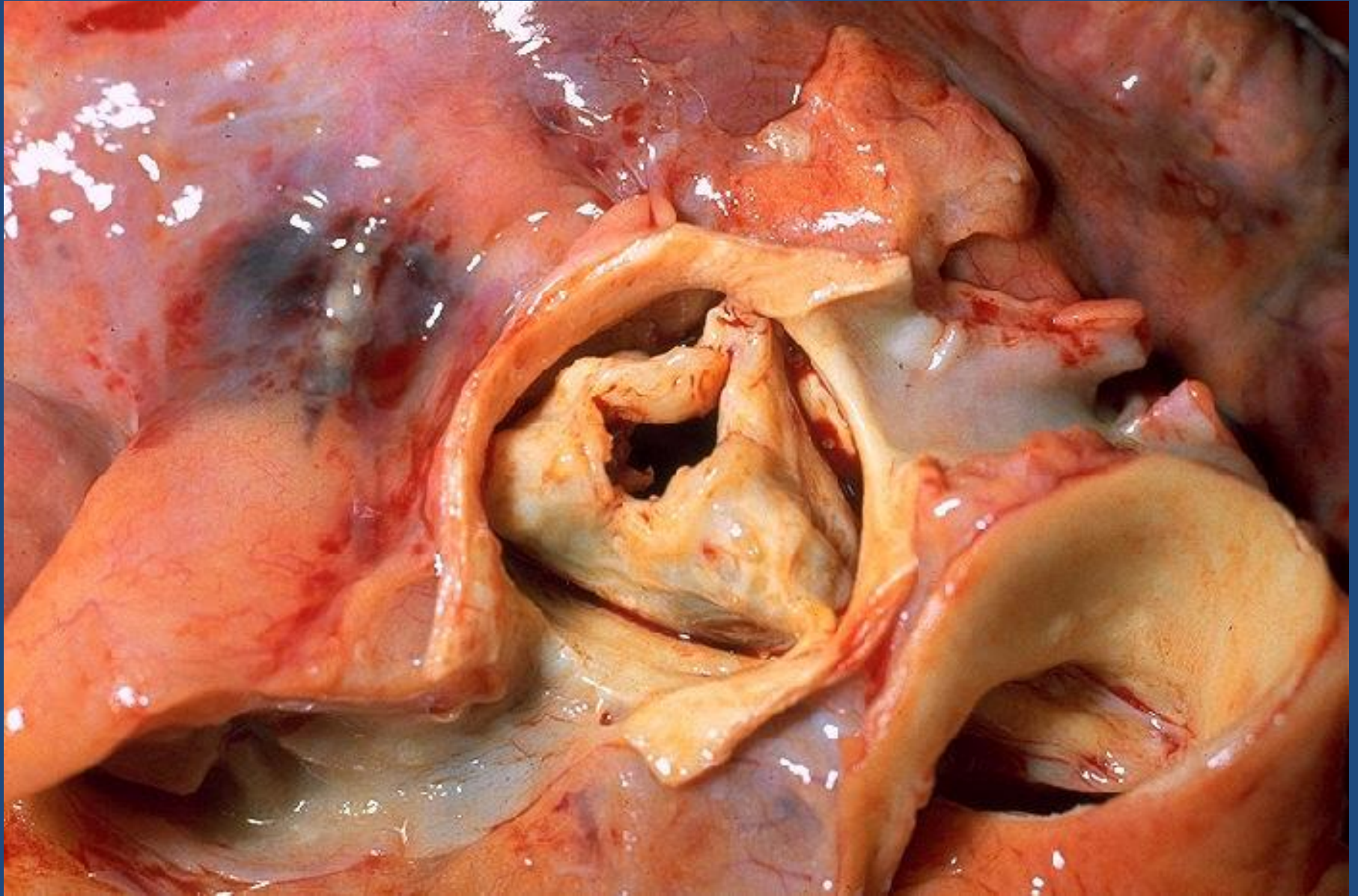
- Valvulotomia chirurgica

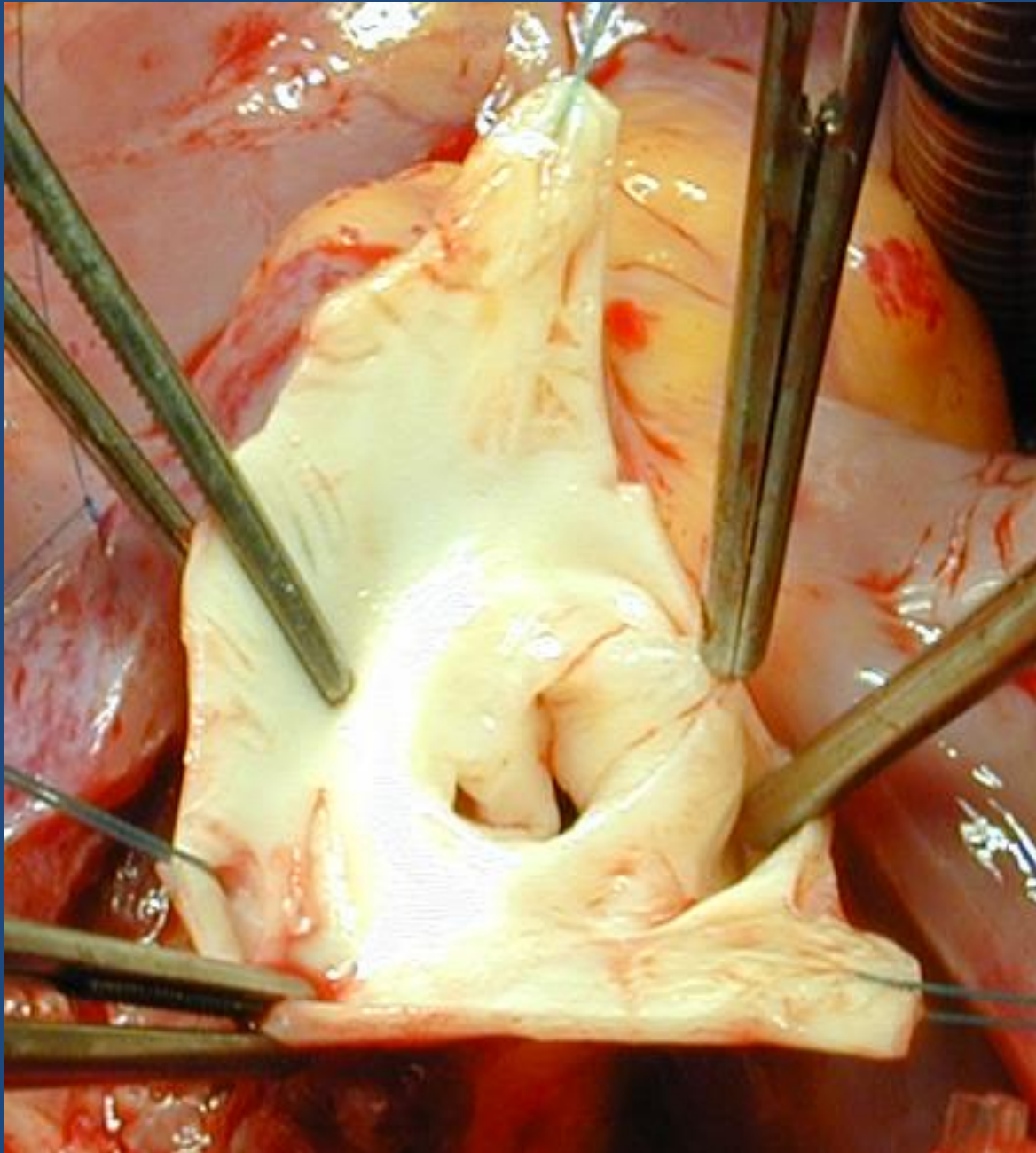
- Sostituzione valvolare



Protesi
Homograft
Ross

STENOSI AORTICA





VALVOLA
MONOCUSPIDE



Mechanical

Autograft

Stentless



Freestyle



Sostituzione Valvolare

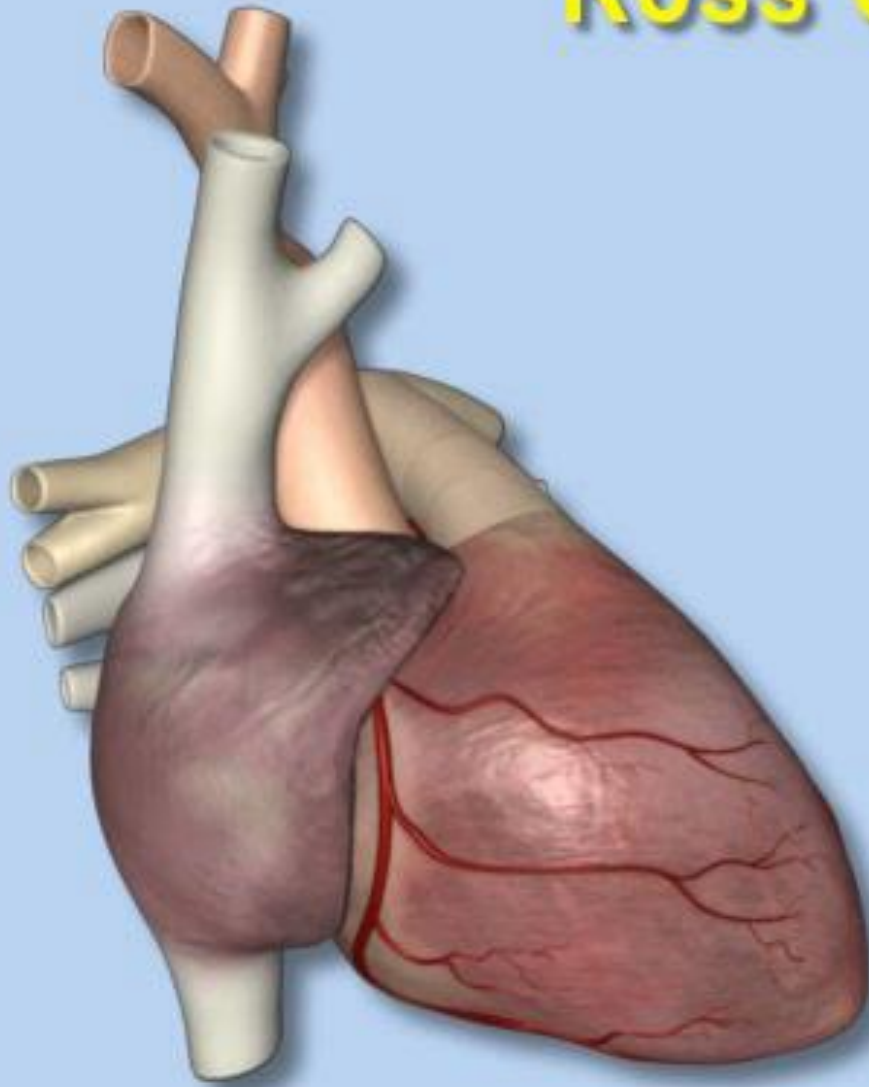
Homograft



Stented

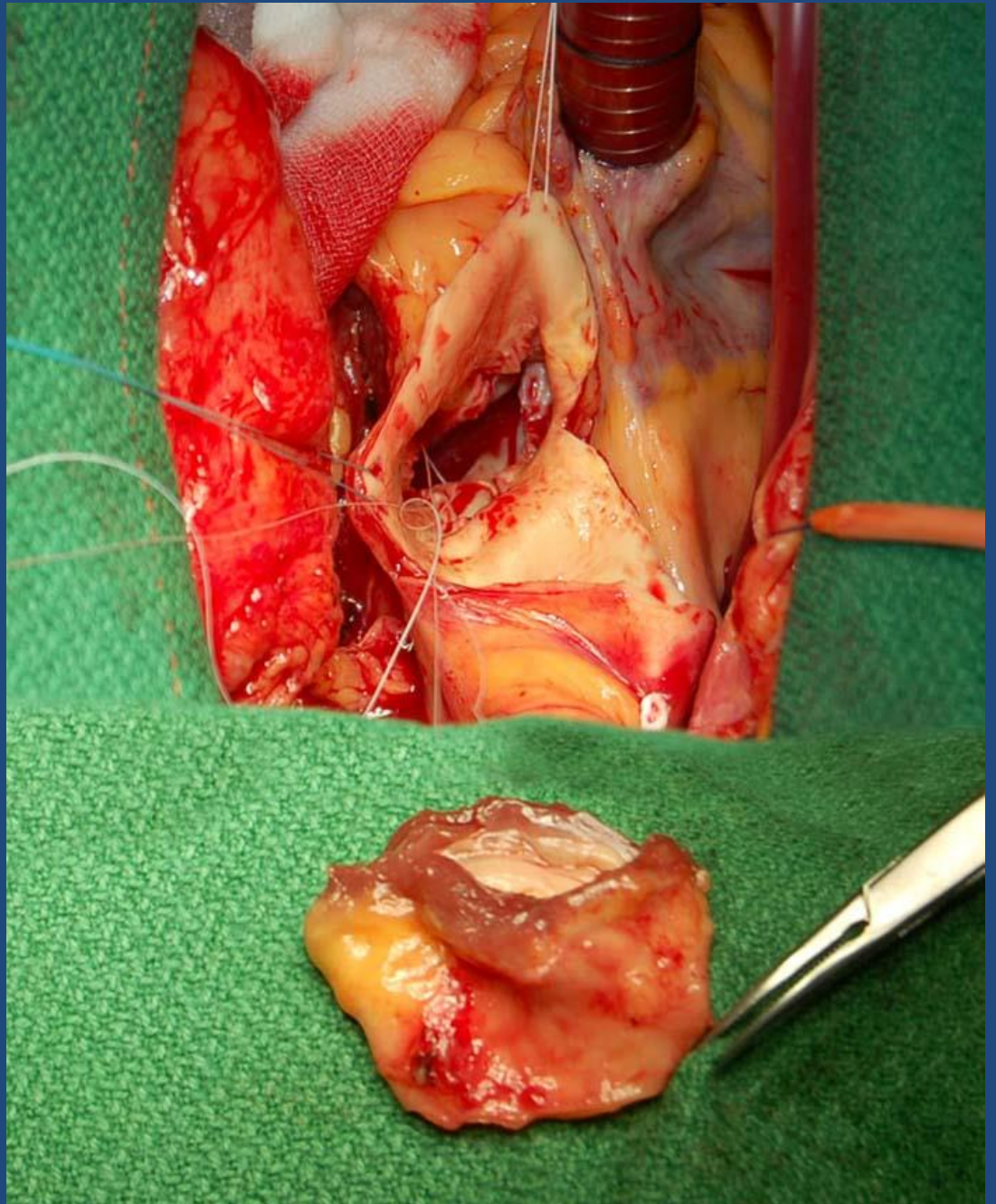


Ross Operation

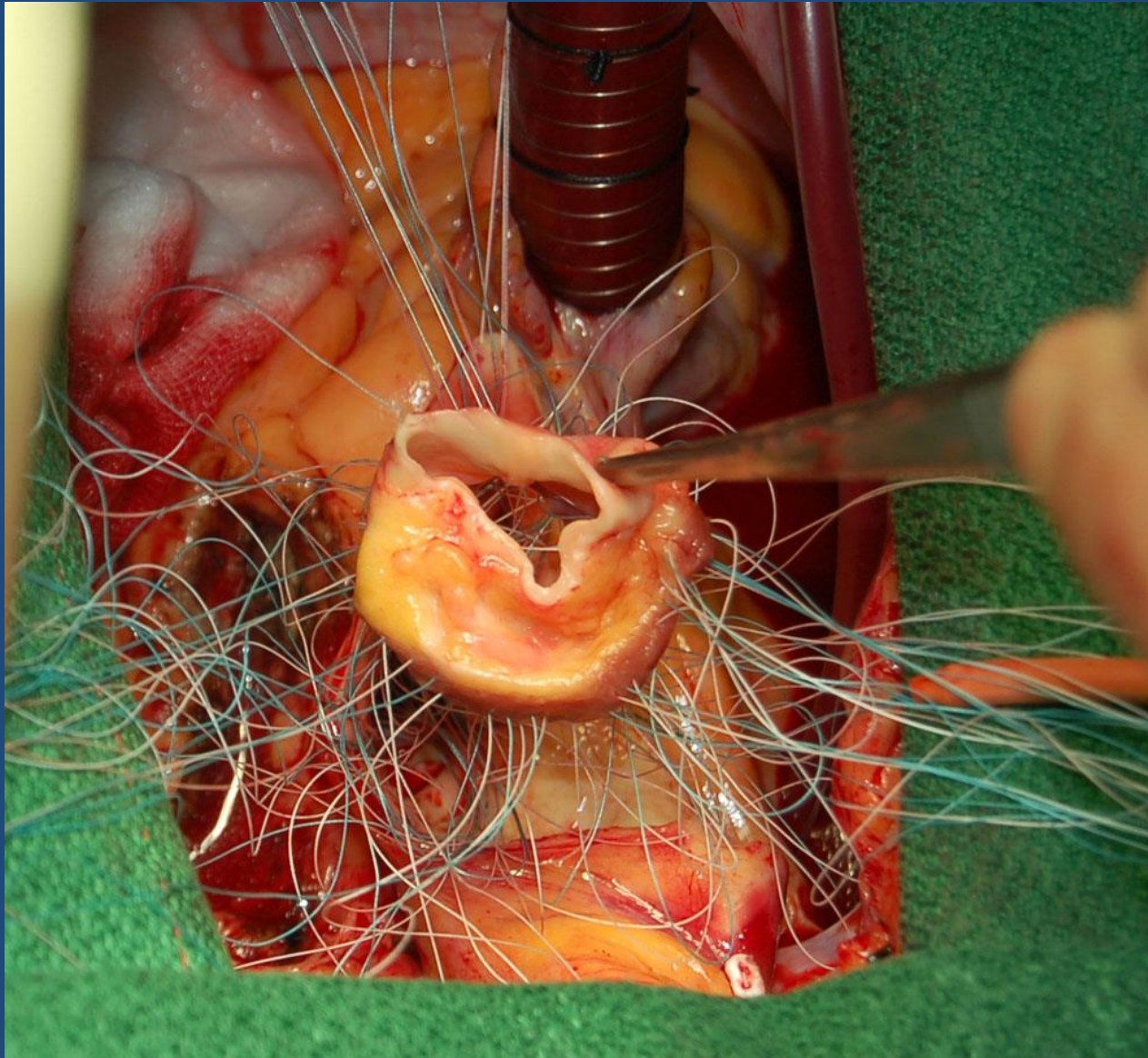


Root Technique

Sub Coronary Technique



Sub Coronary Technique



Sub Coronary Technique



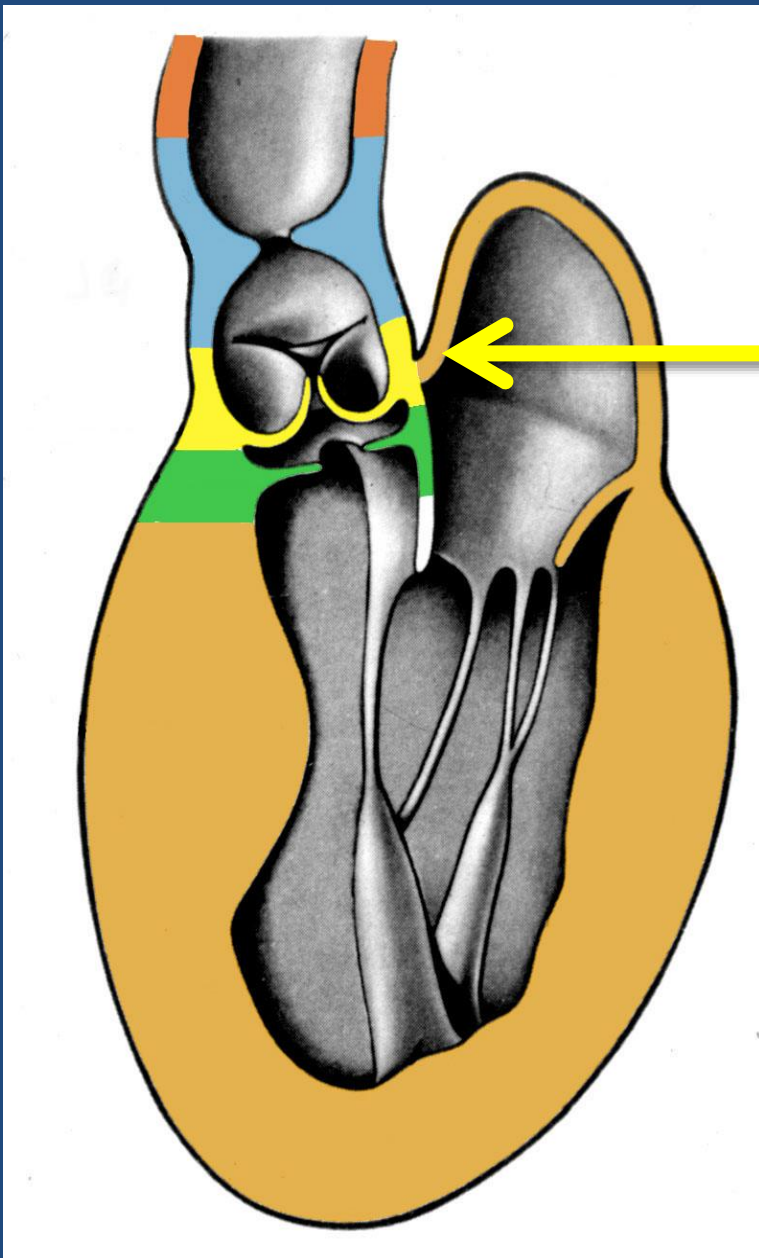
ROSS Operation

San Donato Experience

August 1994 – December 2012

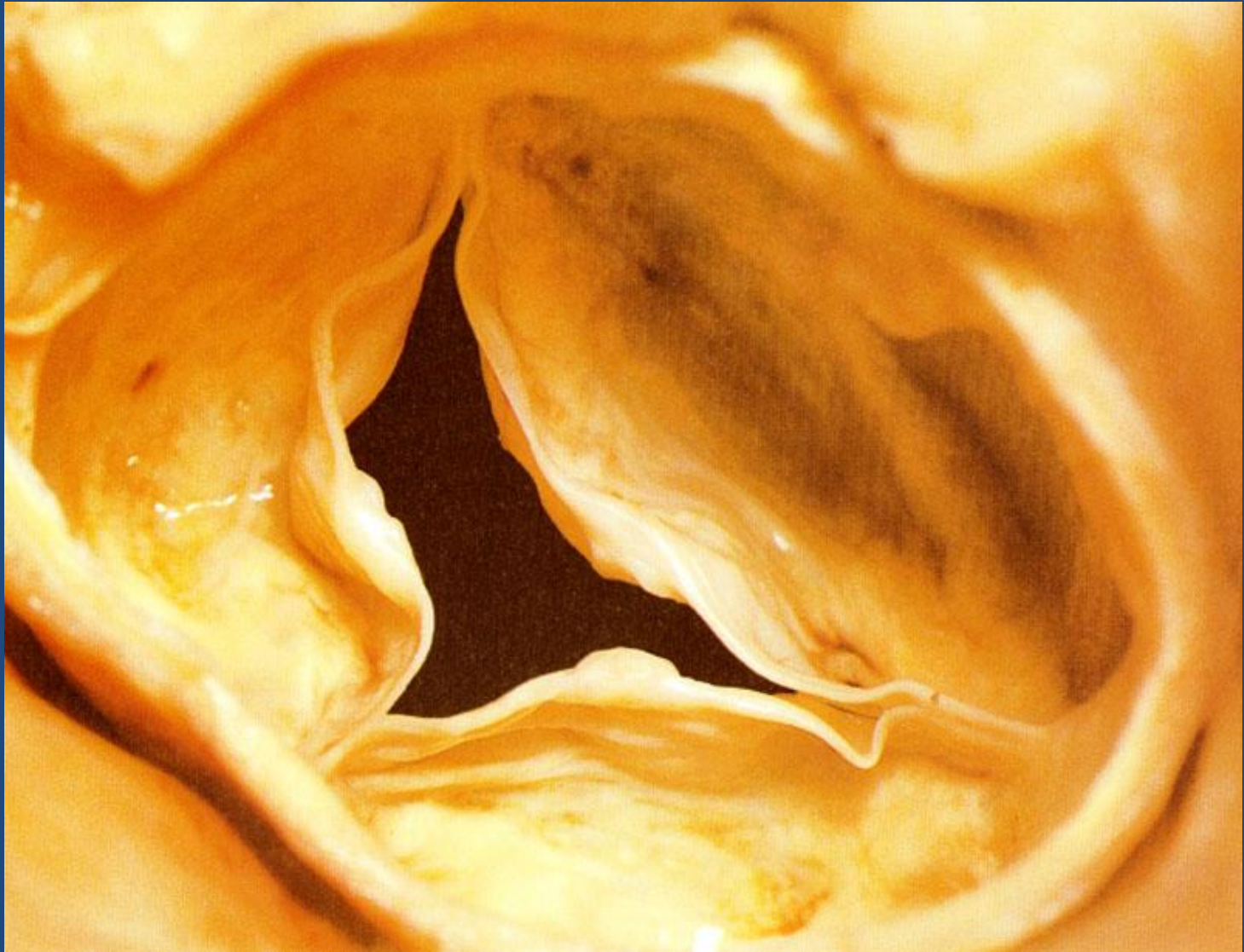
Patients	271 (1 death 0,36%)
Age	21.5 years (1 m - 59 yrs)
Pediatrics pts	126 (46.5%) (1m - 17 yrs)

Ross-Konno	24 patients
------------	-------------

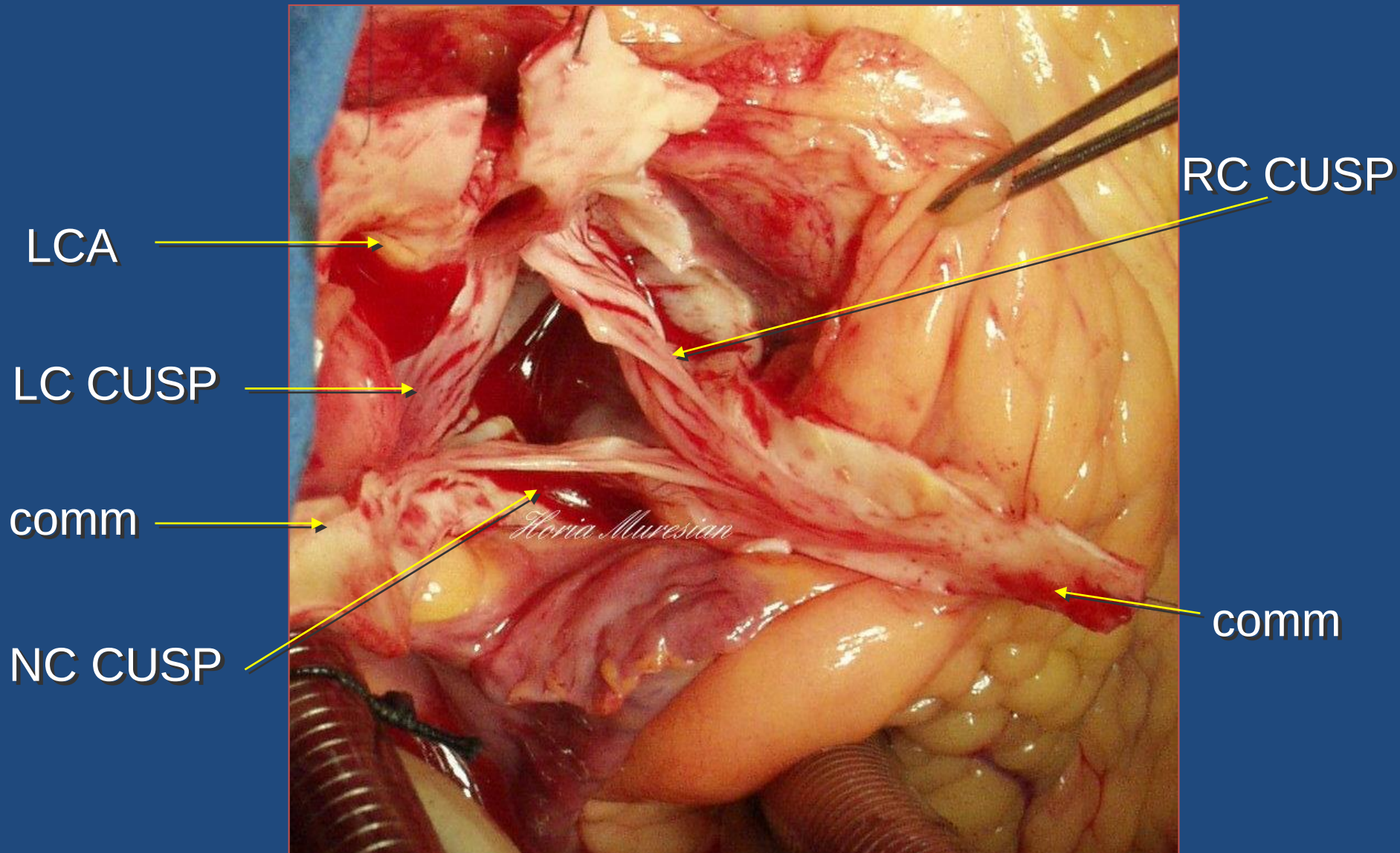


**INSUFFICIENZA
AORTICA**

INSUFFICIENZA AORTICA

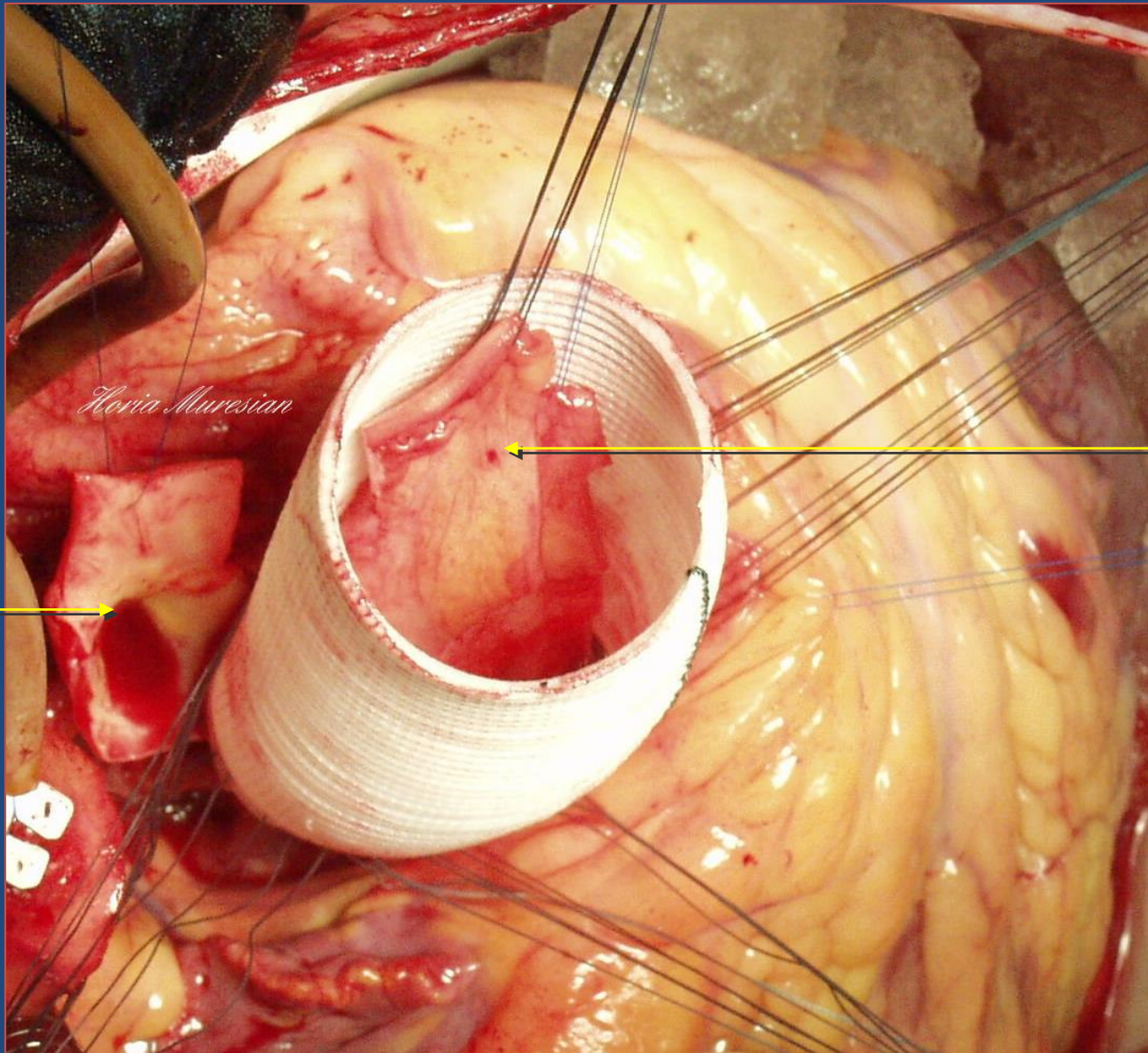


DAVID PROCEDURE AORTIC ROOT PREPARED



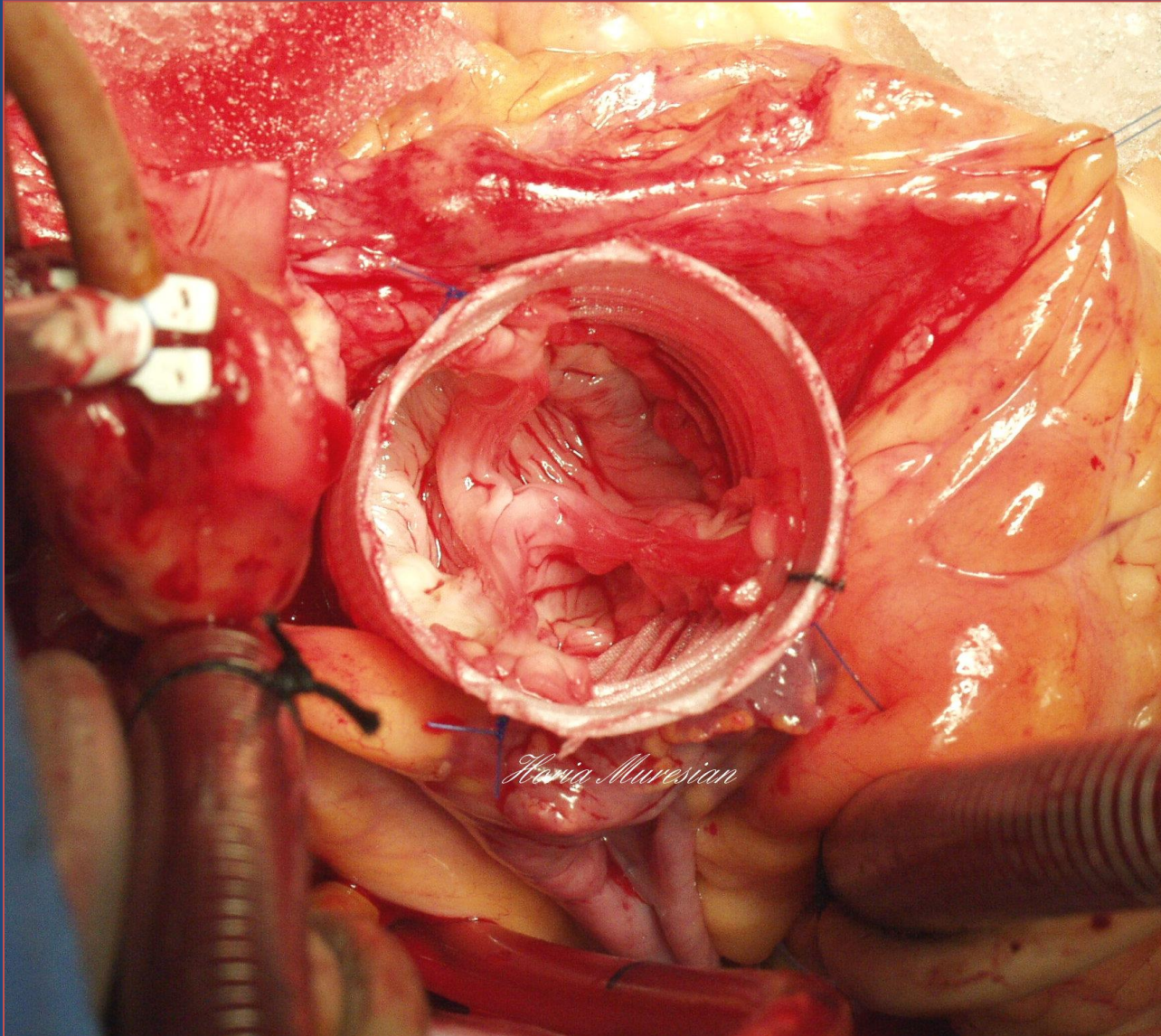
DAVID PROCEDURE PROSTHESIS DOWN ON THE ANNULUS

LCA

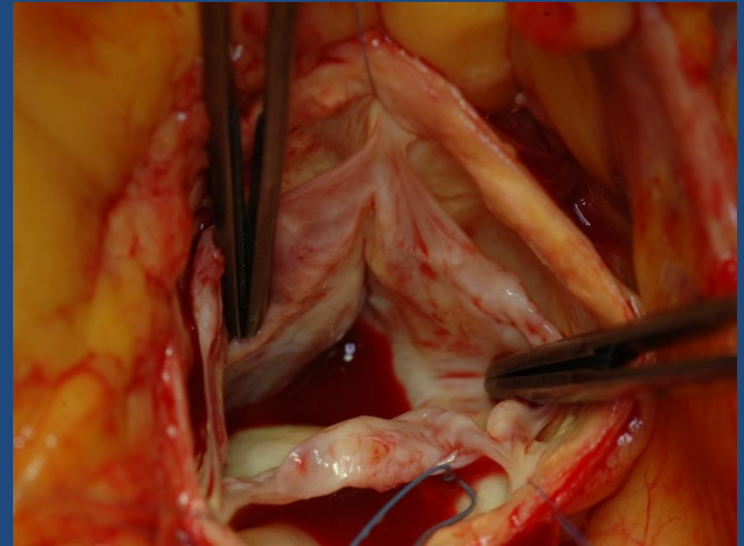
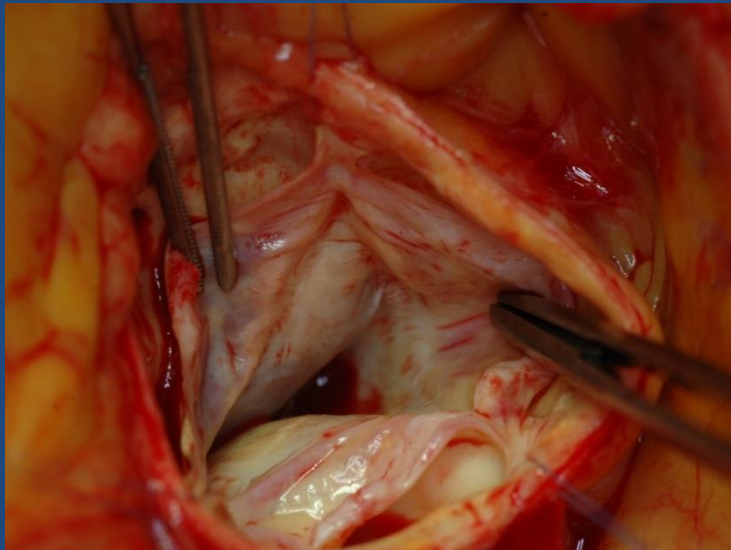
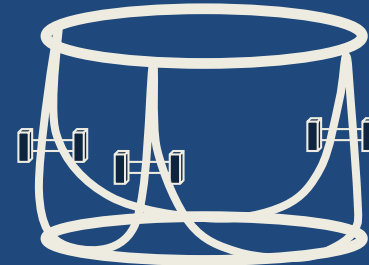
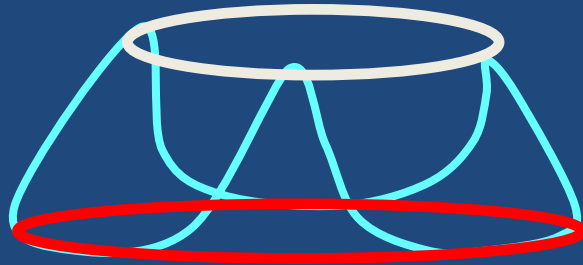


Commissures
pulled up

DAVID PROCEDURE CHECKING FOR AORTIC INSUFFICIENCY

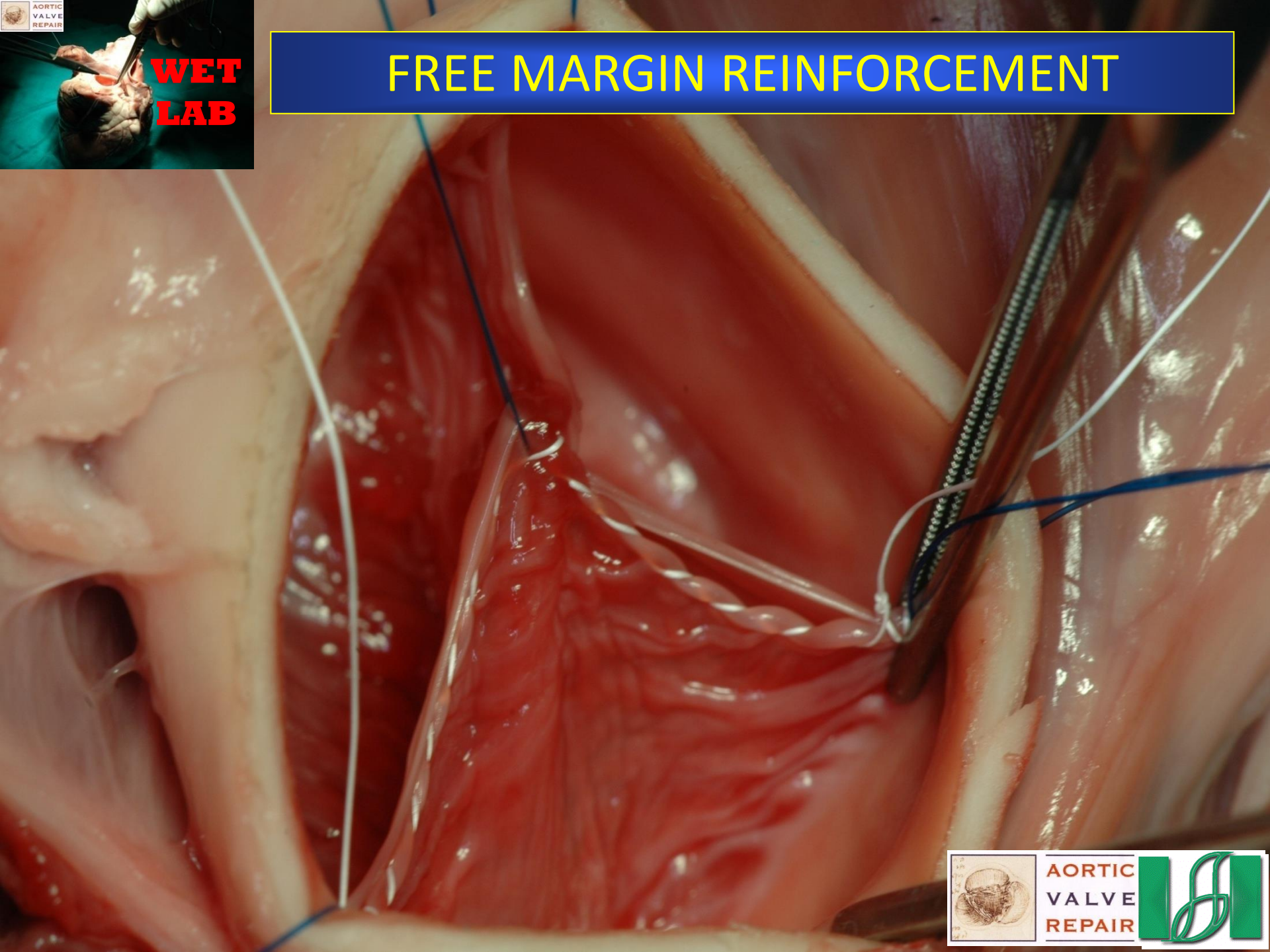


Partial Subcommissural Anuloplasty



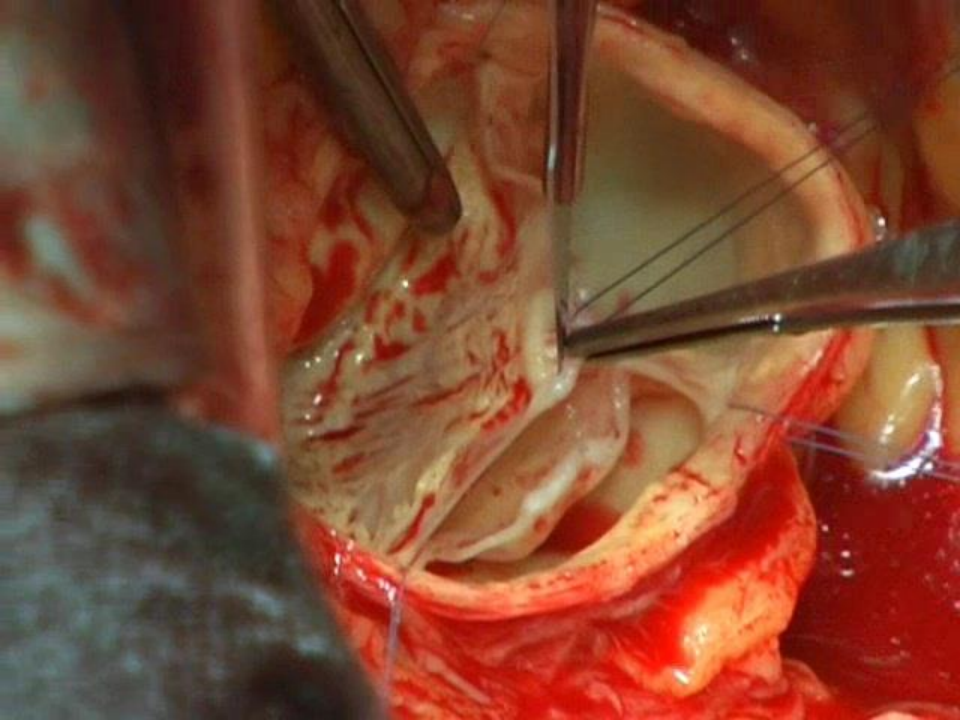
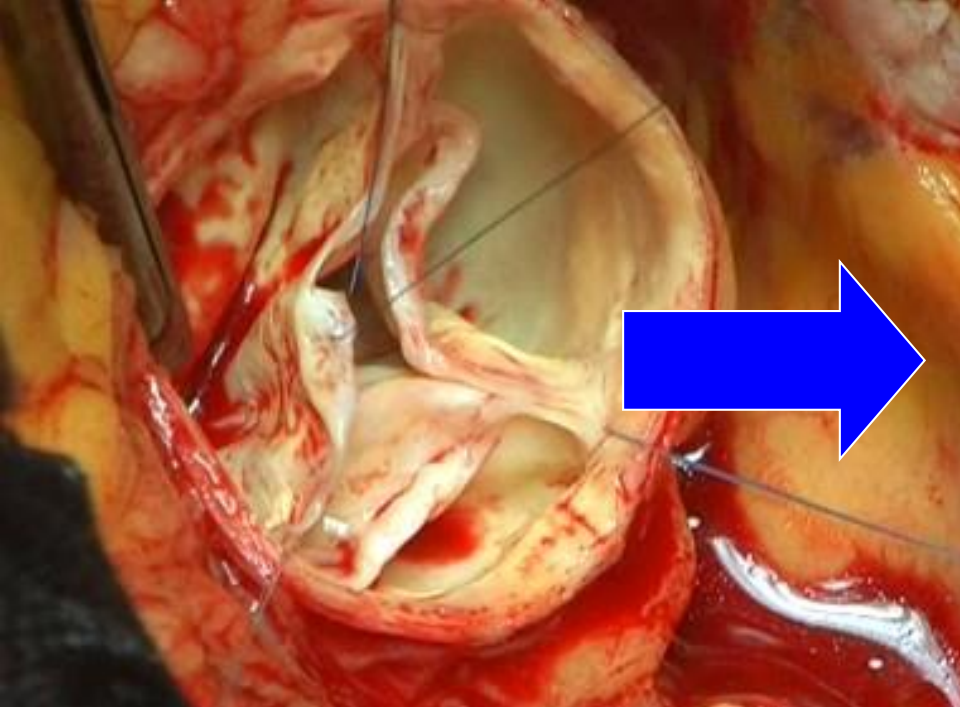
**WET
LAB**

FREE MARGIN REINFORCEMENT



**AORTIC
VALVE
REPAIR**





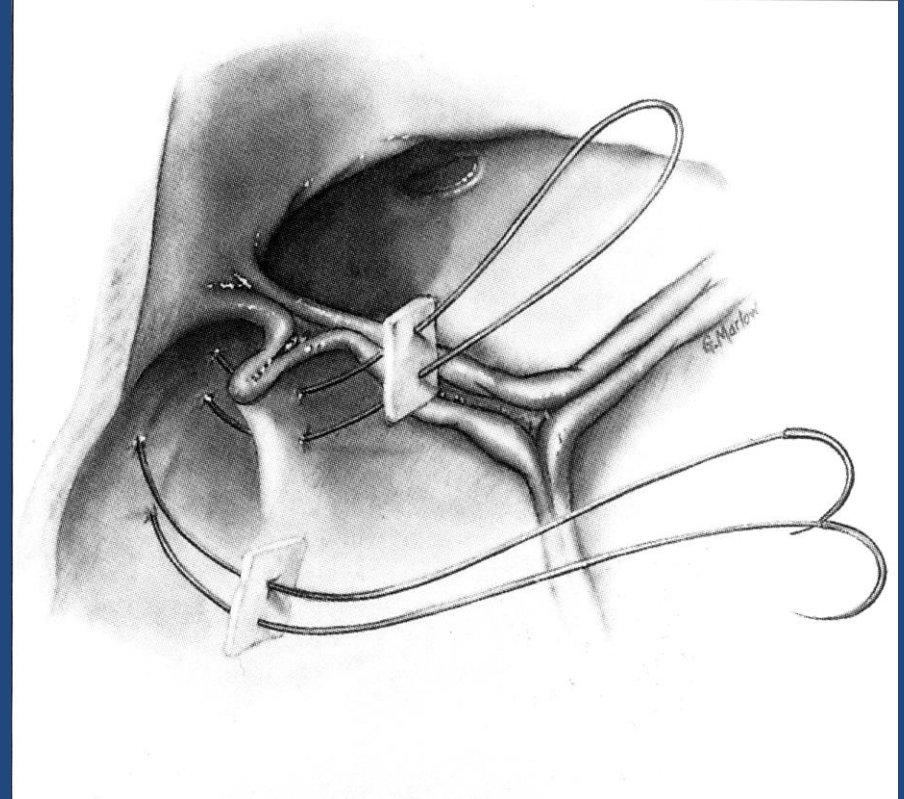
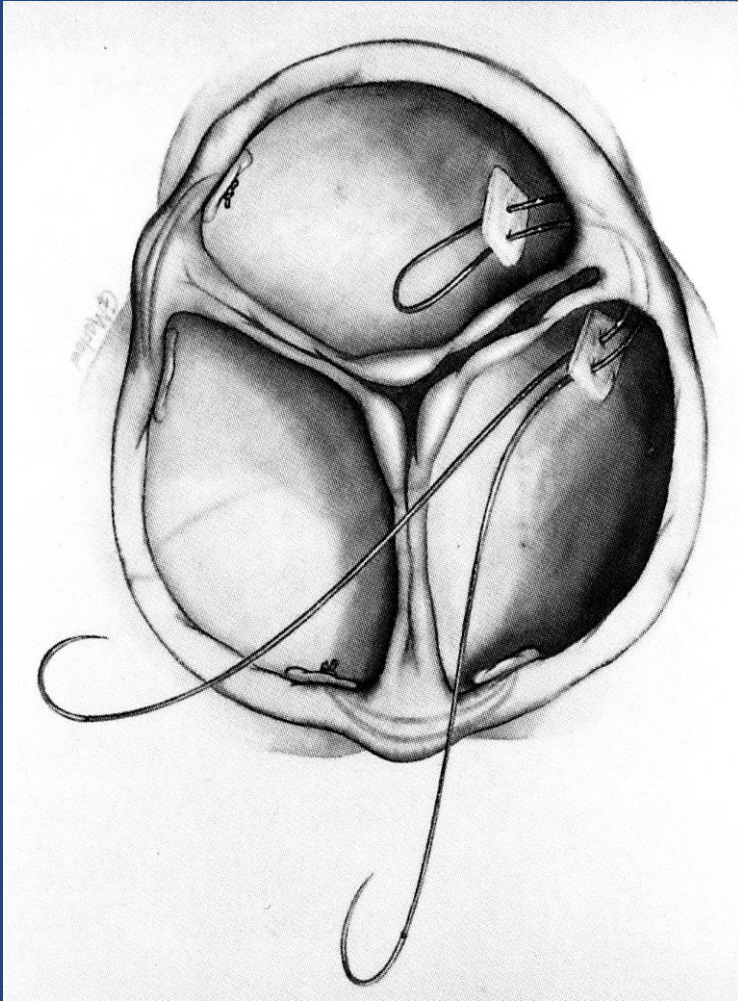
SHAVING



**AORTIC
VALVE
REPAIR**

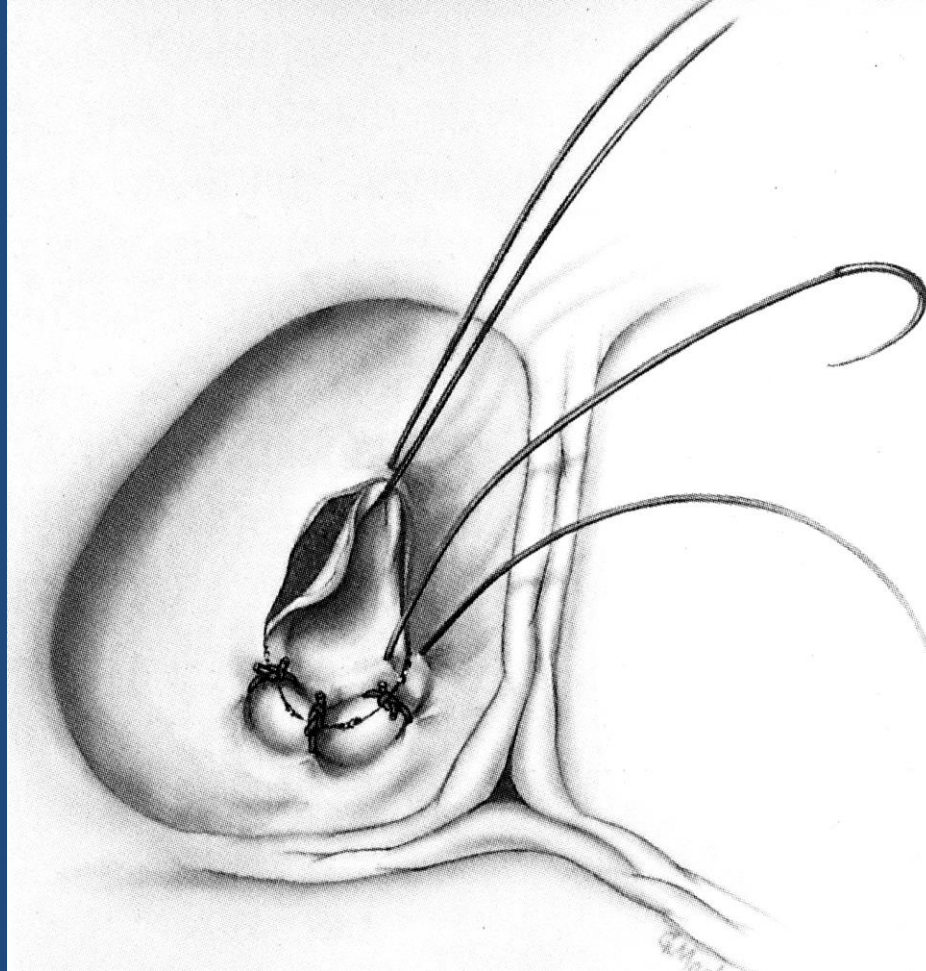


INSUFFICIENZA AORTICA



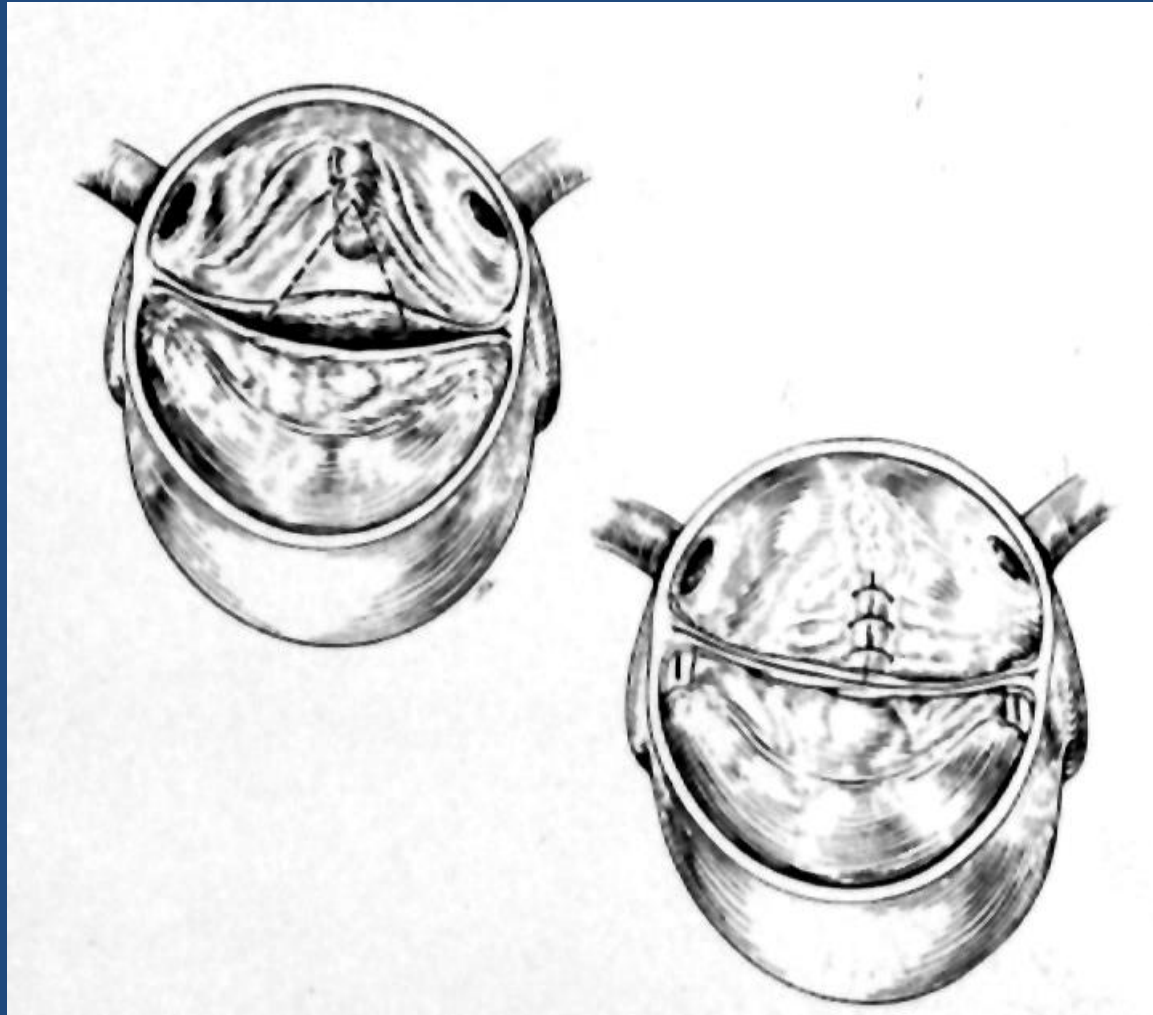
RISOSPENSIONE CUSPIDI - TRUSLER

INSUFFICIENZA AORTICA (PERFORAZIONE CUSPIDE)



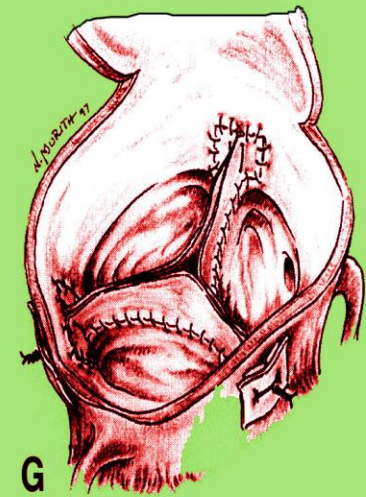
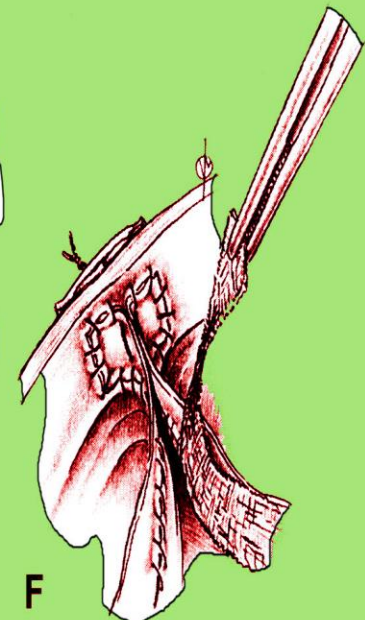
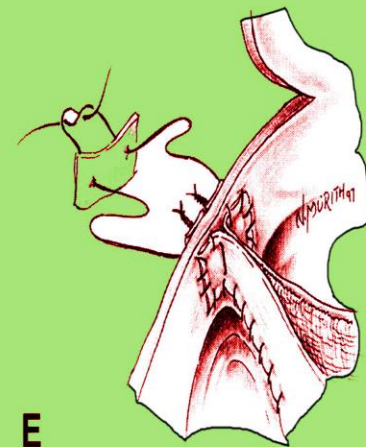
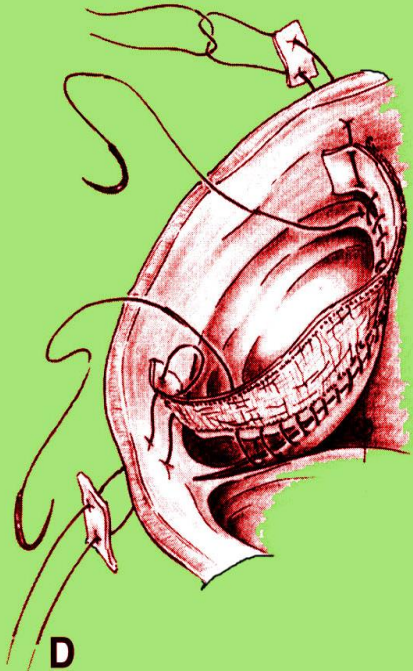
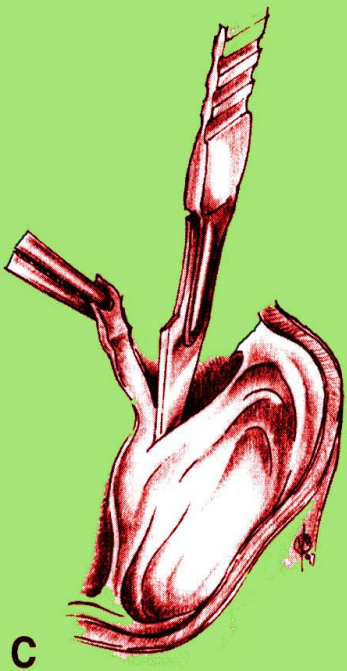
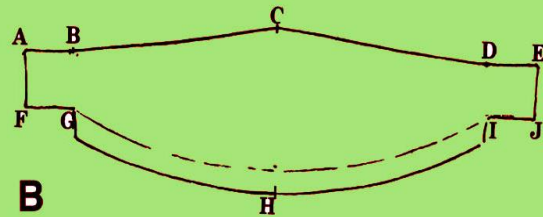
RICOSTRUZIONE CUSPIDE CON PATCH

INSUFFICIENZA AORTICA

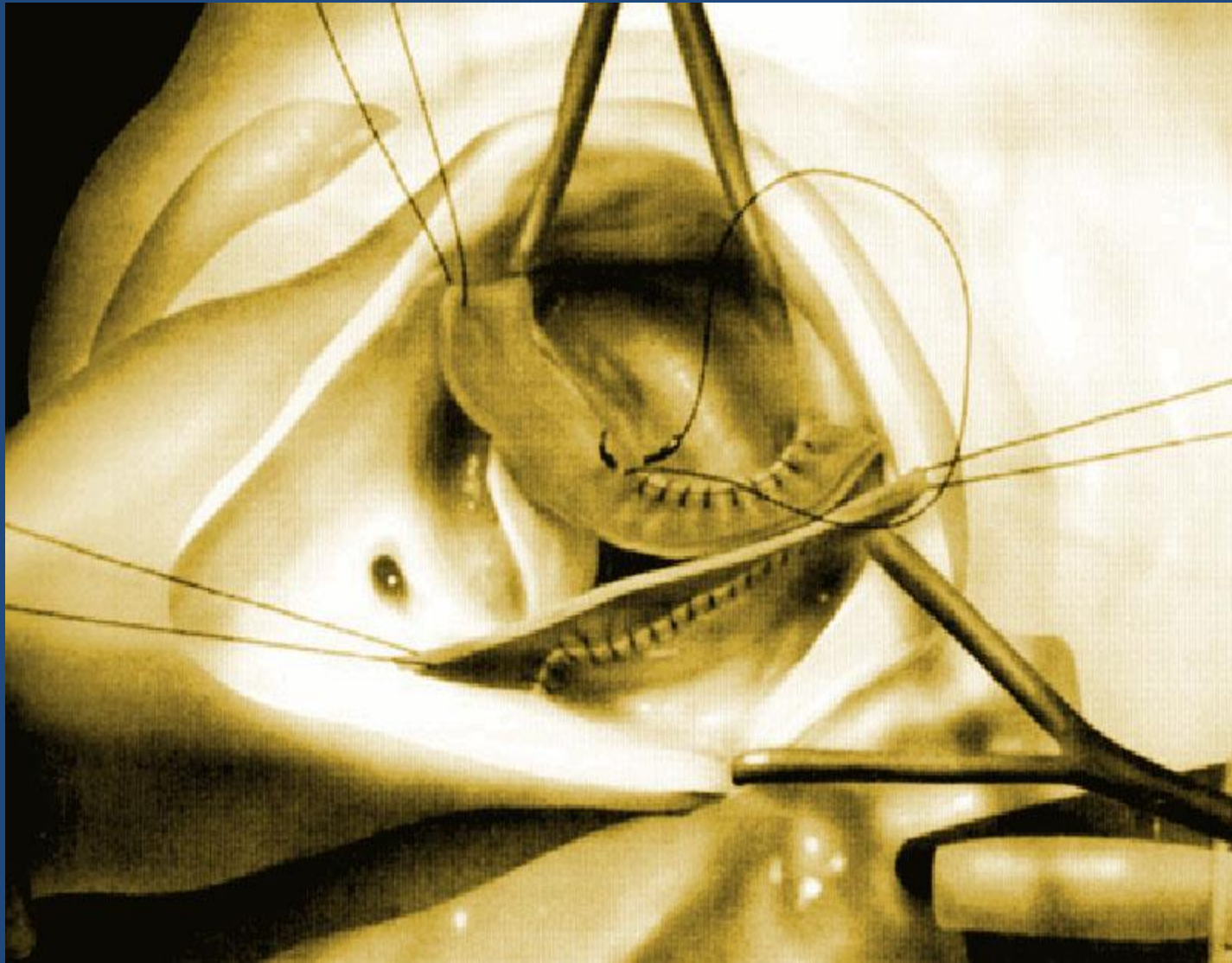


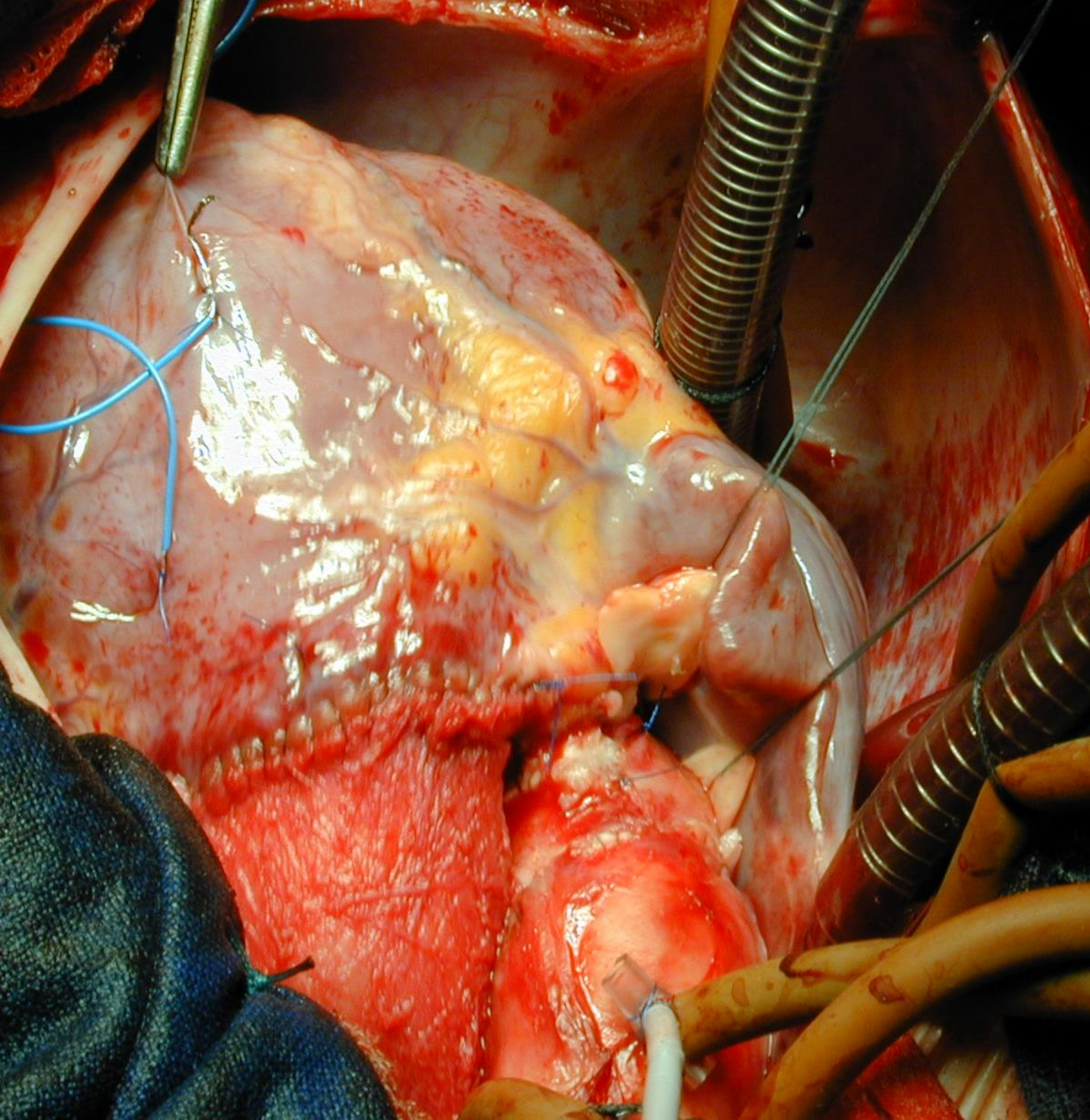
RESEZIONE TRIANGOLARE

Plastica aortica con cuspidi di pericardio

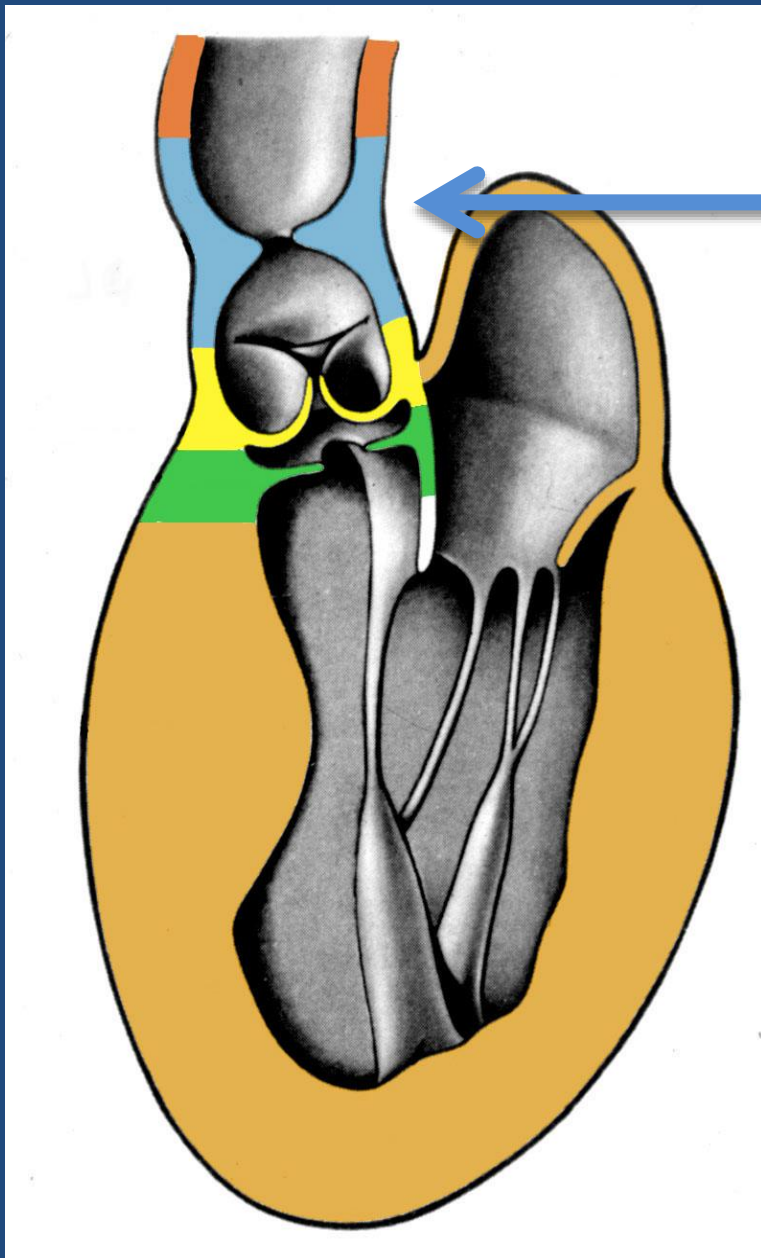


Ricostruzione Cuspidi con Pericardio



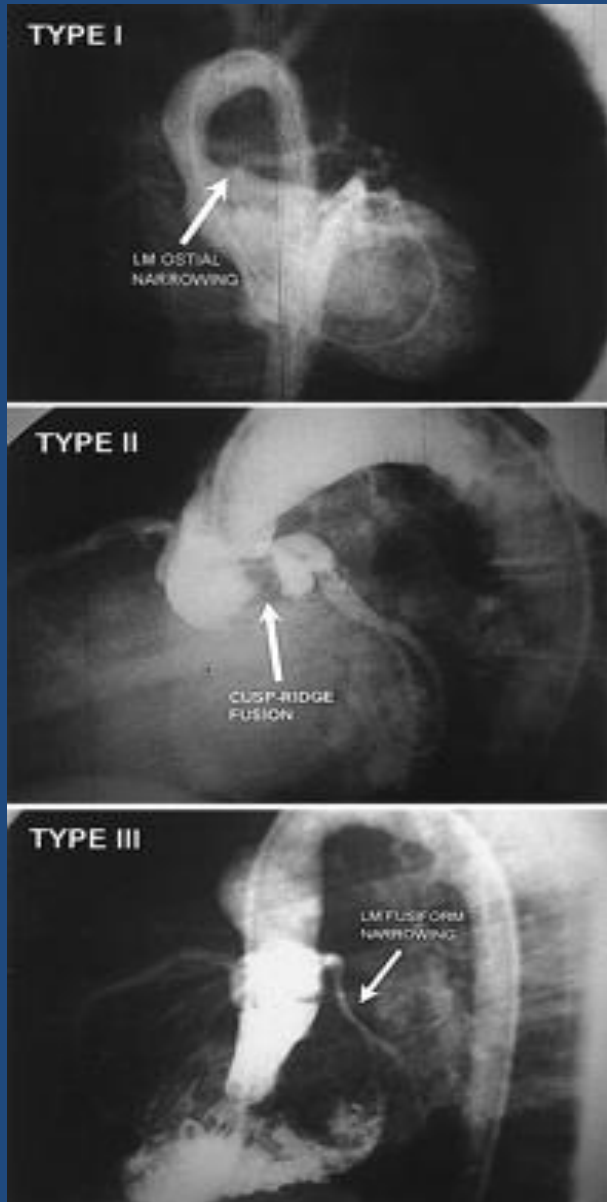


**Intervento
di ROSS**



**STENOSI
SOPRAVALVOLARE
AORTICA**

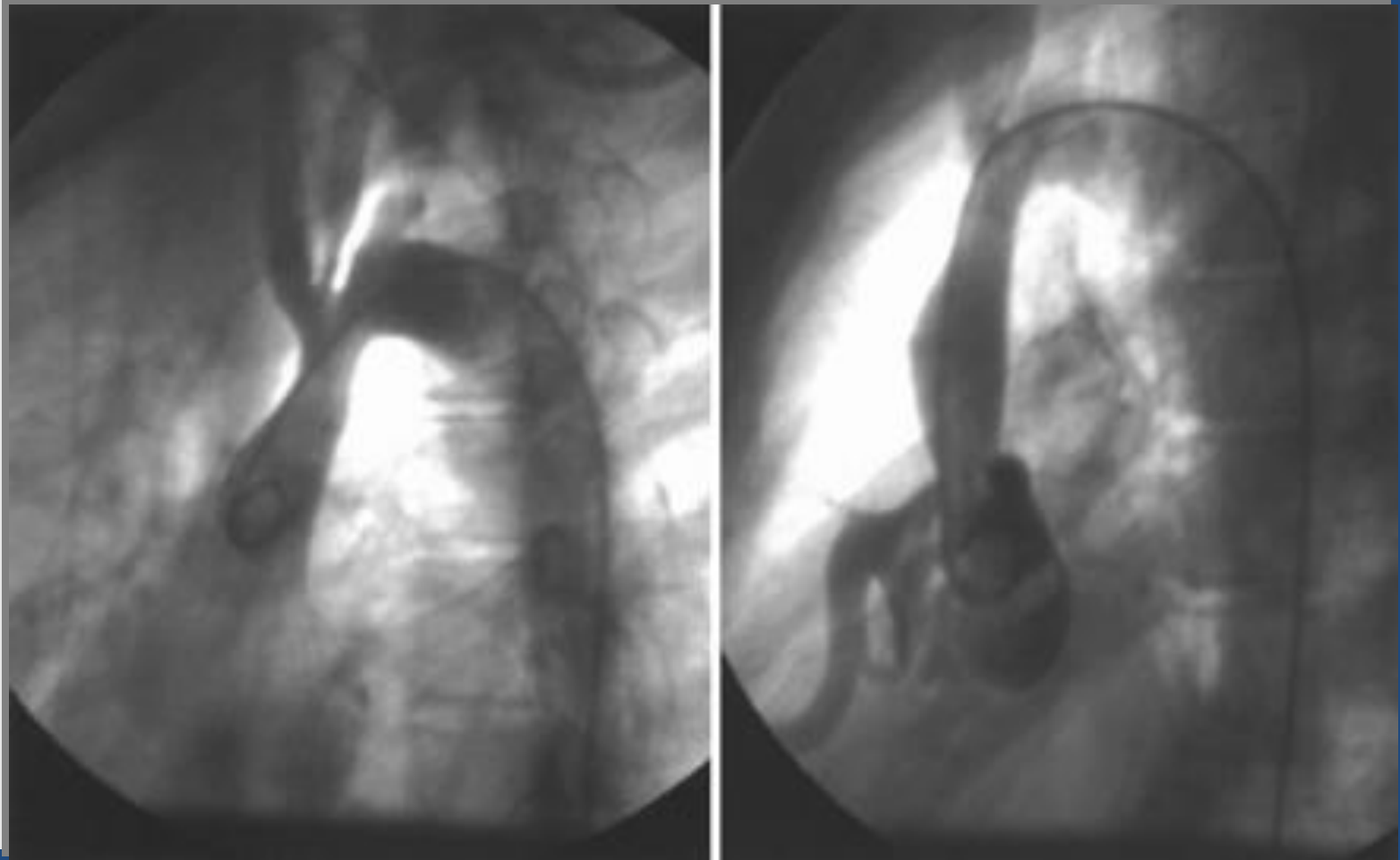
STÉNOSE SUPRA VALVULAIRE AORTIQUE



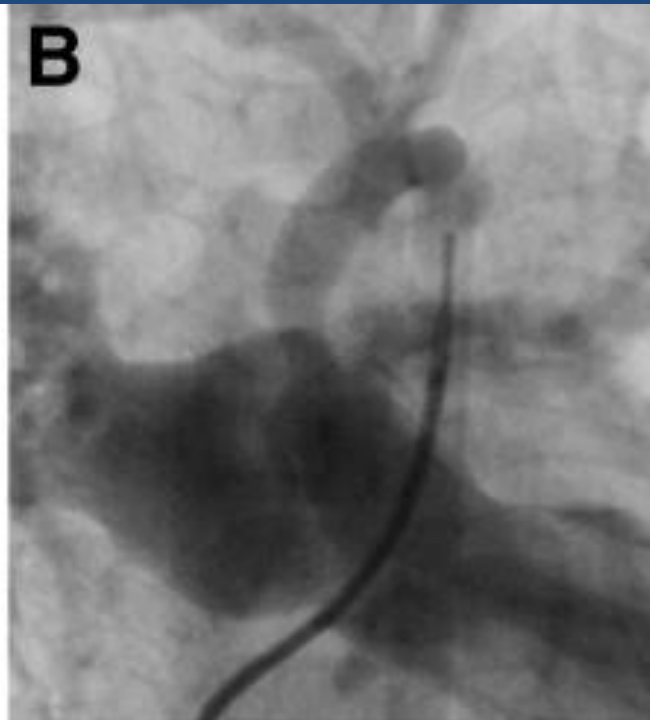
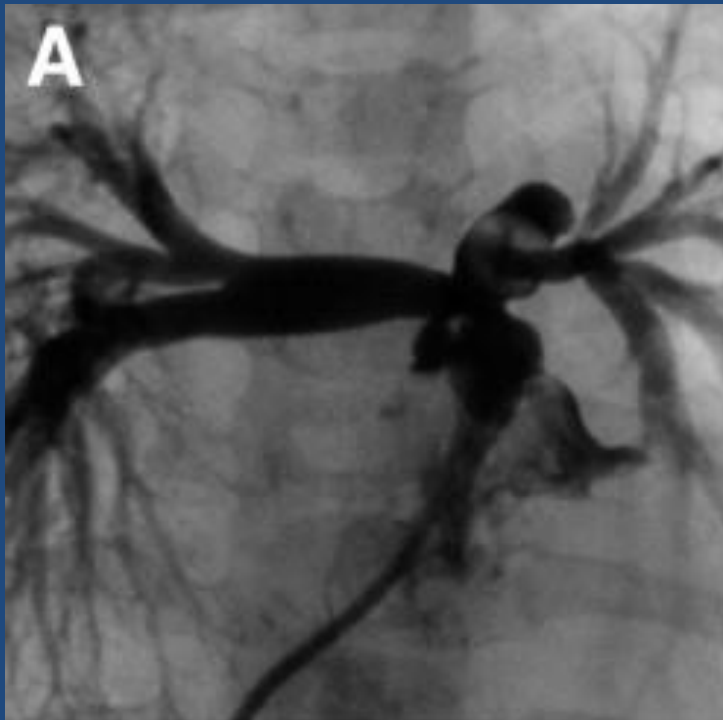
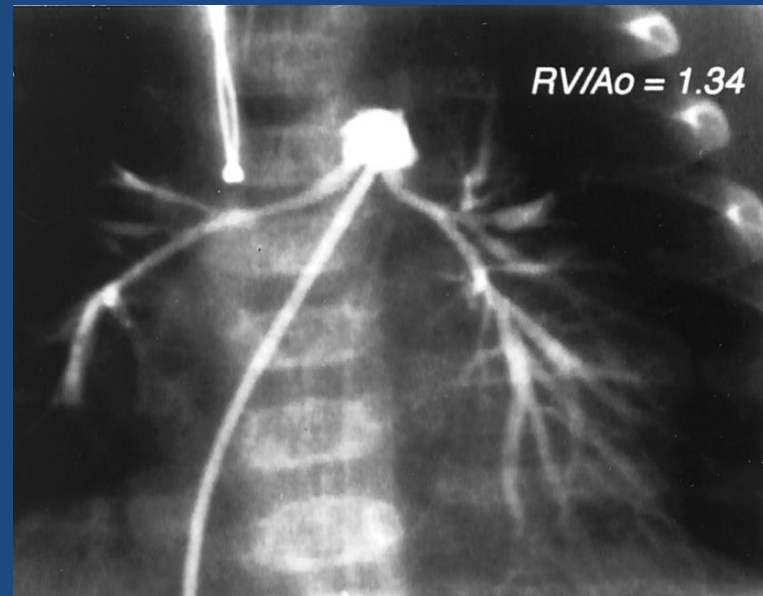
Obstruction congénitale de l'artère
coronaire gauche

STÉNOSE SUPRA VALVULAIRE AORTIQUE

Stenose supra – valvulaire diffuse avec rétrécissement de l’origine du tronc brachiocéphalique et de la carotide commune gauche

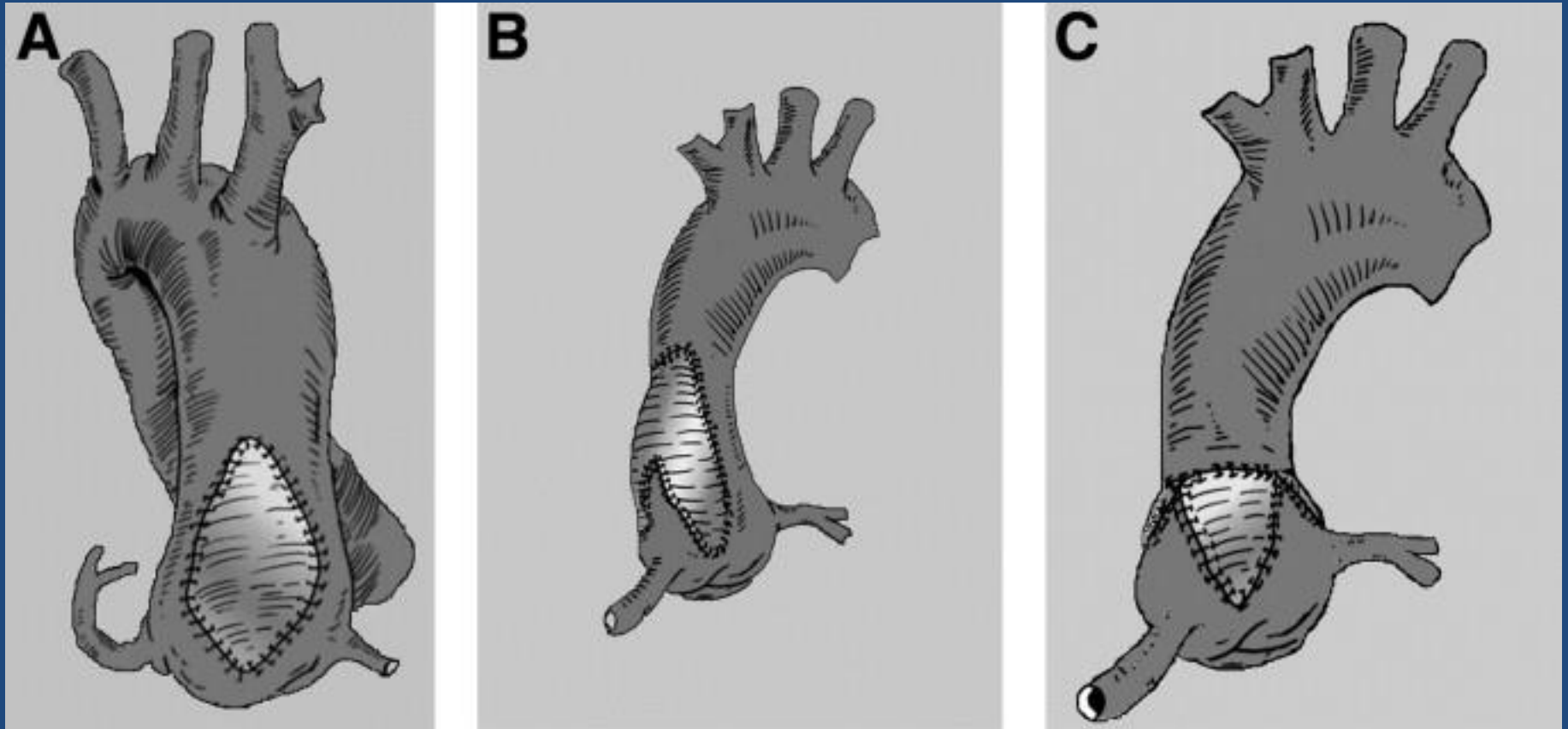


STENOSI SOPRAVALVOLARE AORTICA E SINDROME DI WILLIAMS



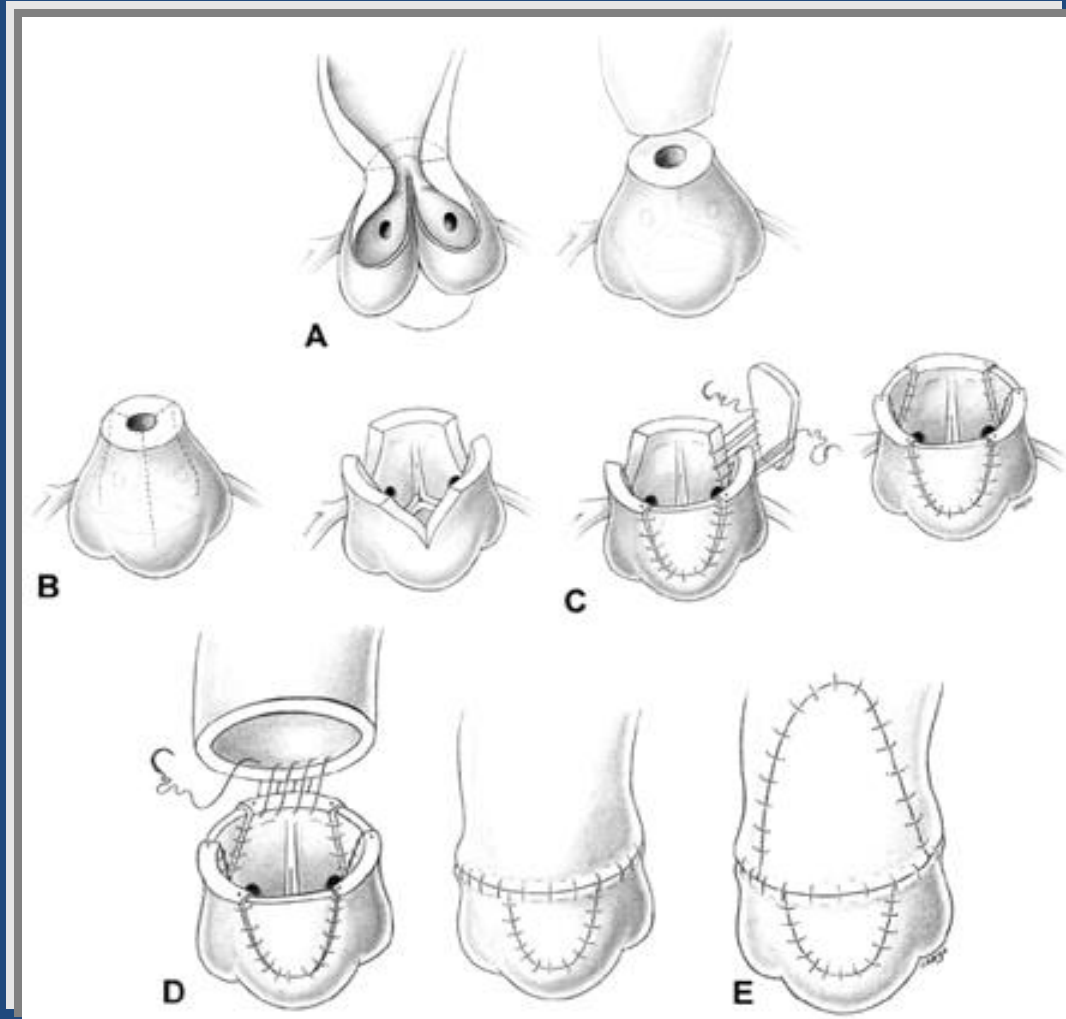
STENOSI SOPRAVALVOLARE AORTICA

Tecniche chirurgiche



STÉNOSE SUPRA VALVULAIRE AORTIQUE

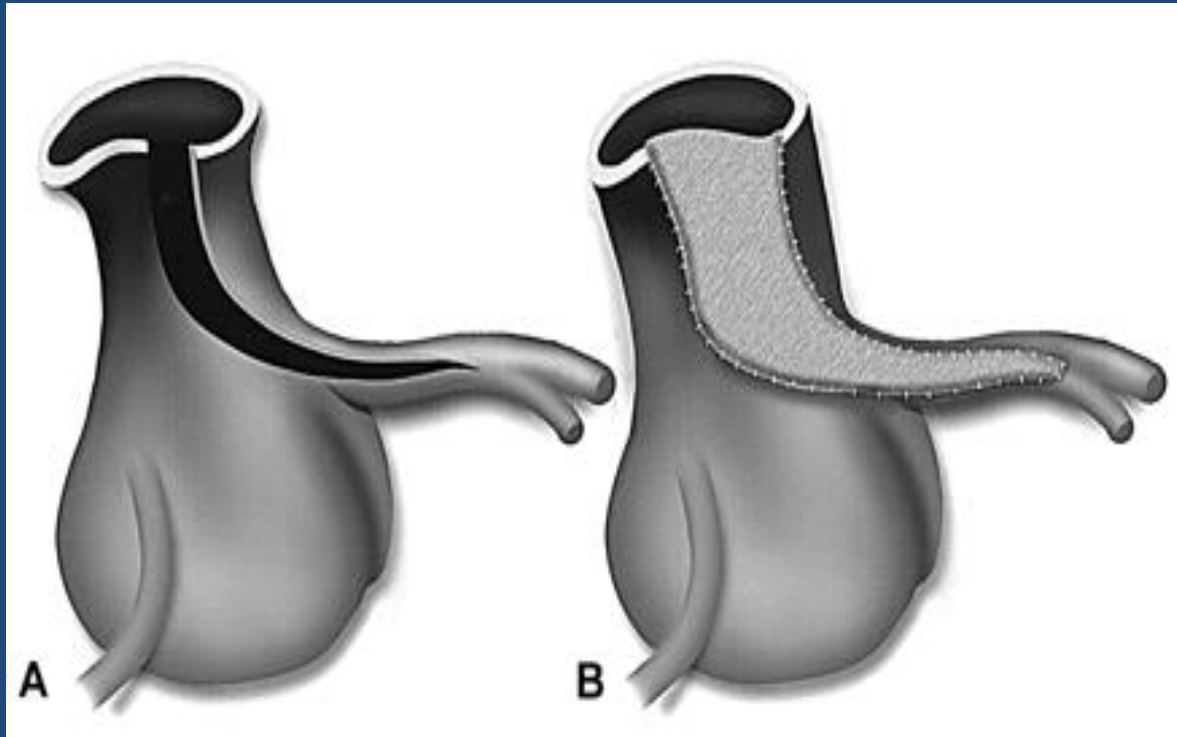
TECHNIQUE DE BROM (DE 3 PATCH)



Reconstruction de la géométrie normale de la racine aortique

STÉNOSE SUPRA VALVULAIRE AORTIQUE

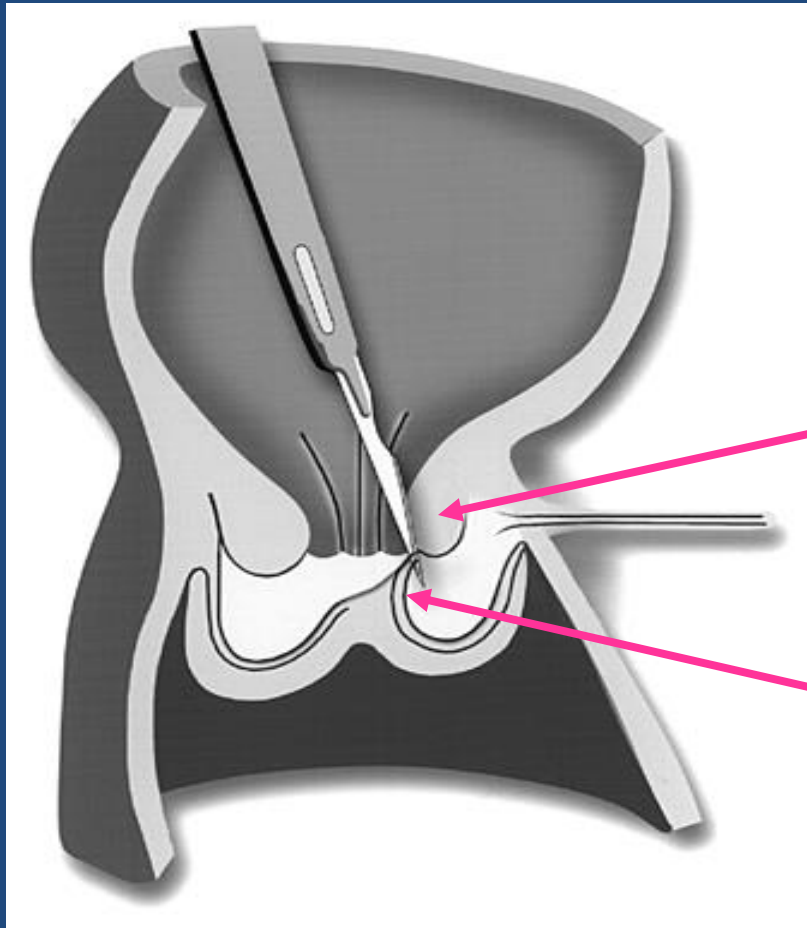
Plastie d'élargissement de l'aorte ascendente
et de la coronaire gauche



Obstruction de la coronaire gauche du premier type/classe

STÉNOSE SUPRA VALVULAIRE AORTIQUE

TECHNIQUE OPÉRATOIRE



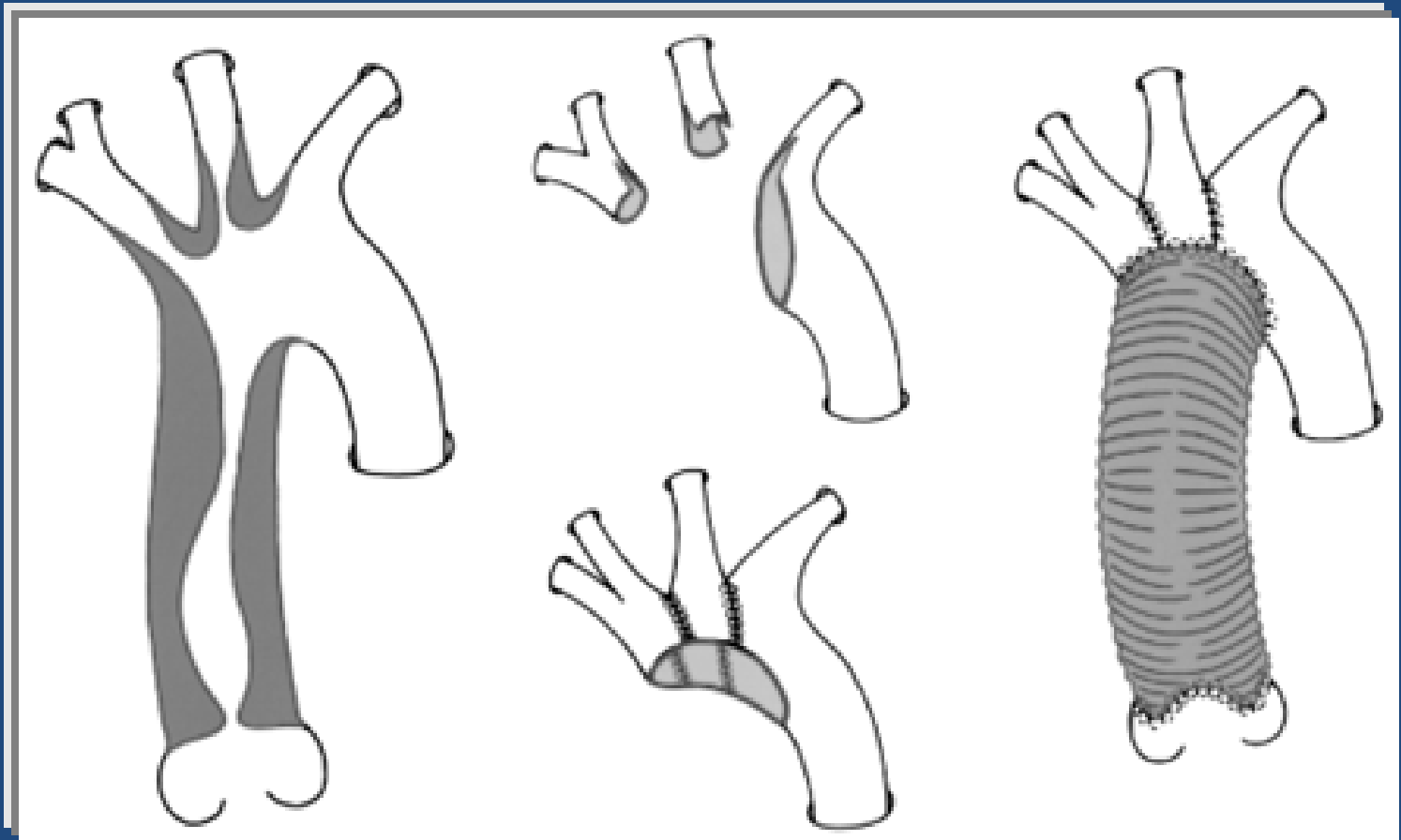
Crête supra – valvulaire

Cuspide coronaire gauche

Obstruction de la coronaire gauche du deuxième type/ classe

STÉNOSE SUPRA VALVULAIRE AORTIQUE

Unifocalisation des vaisseaux du cou et remplacement de l'aorte avec un tube prothétique droit



PATOLOGIE VIA D'USCITA VENTRICOLO SINISTRO

STENOSI SOPRA VALVOLARE AORTICA

Indicazioni operatorie

- Pazienti sintomatici per dispnea o angina : tutti
- Pazienti asintomatici : se gradiente max. $>60-70$

Chirurgia via d'uscita V SX

Esperienza San Donato 1989-2012

Patologie	1-31 gg	1-12 m	1-18 aa	TOT
Sten. Sottov. Ao	1 (†0)	10 (†0)	206(†0)	217 (†0)
Sten. Ao	9 (†2)	20 (†2)	314 (†1)	343 (†5 -1.4%)
Insuff. Ao	4 (†1)	17 (†0)	276 (†7)	297 (†8 2.6%)
Sten. Soprav. Ao	0 (†0)	3 (†0)	40(†0)	217(†0)
Miocard. Iper. Ostrut.	-	1 (†0)	10 (†0)	11(†0)
	14	51	870	935 (†13 1,4%)

Conclusioni

Le patologie della via d'uscita del ventricolo sinistro , rappresentano un capitolo importante della cardiologia e della cardiochirurgia.

Esse si presentano sotto varie forme a volte molto gravi ma che oggi possono essere trattate con buoni risultati soprattutto nei centri ad alto volume di attività.

La diagnosi precoce è fondamentale per un buon esito dell'intervento e per il timing chirurgico.

Grazie dell'attenzione