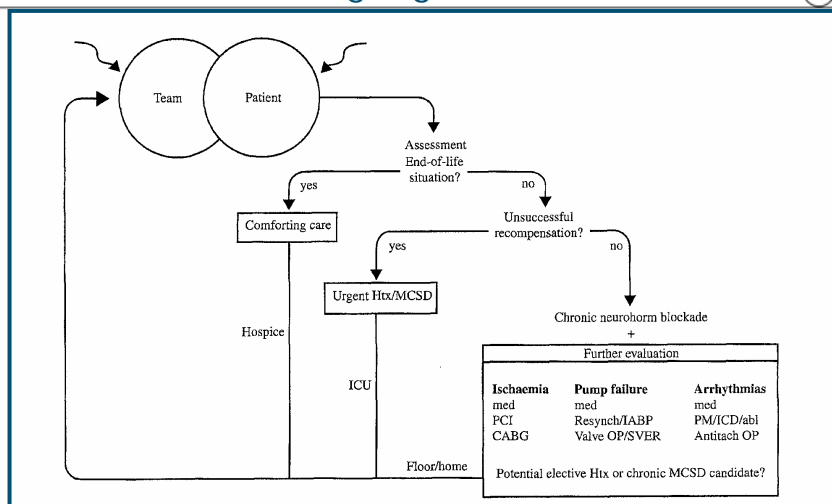


Chirurgische Therapieoption der chronischen Herzinsuffizienz

WESTDEUTSCHES HERZZENTRUM ESSEN
KLINIK FÜR THORAX- UND KARDIOVASKULÄRE CHIRURGIE

Fortgeschrittene Herzinsuffizienz „Behandlungsalgorithmus“

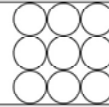


WESTDEUTSCHES HERZZENTRUM ESSEN
KLINIK FÜR THORAX- UND KARDIOVASKULÄRE CHIRURGIE

02.11.2005

2

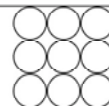
Chirurgische Therapieoption



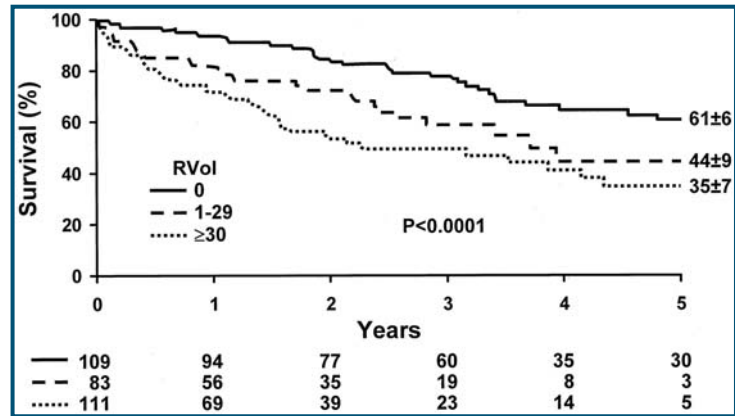
- Mitralklappenrekonstruktion
- Rekonstruktion der Ventrikelgeometrie

- Resynchronisation
- Operative Myokardrevaskularisation
- Mechanische Kreislaufunterstützung
- Herztransplantation

Mitralklappenrekonstruktion



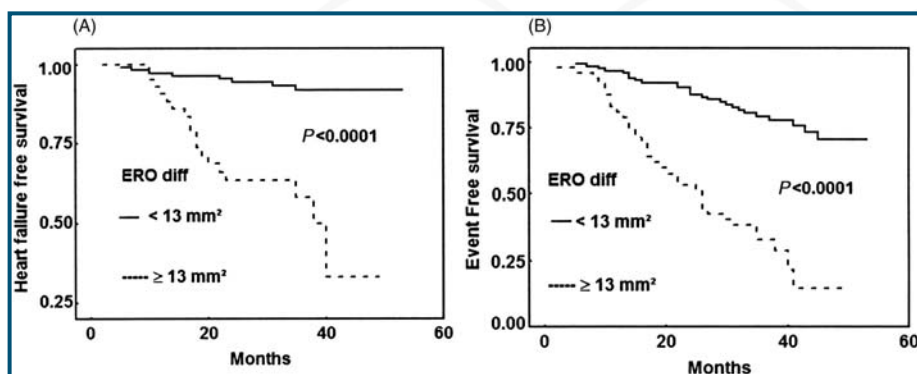
„HF“ und Mitralklappeninsuffizienz



Grigioni et al. *Circulation* 2001;103:1759-1764

„HF“ und Mitralklappeninsuffizienz

Belastungsinduzierte MI

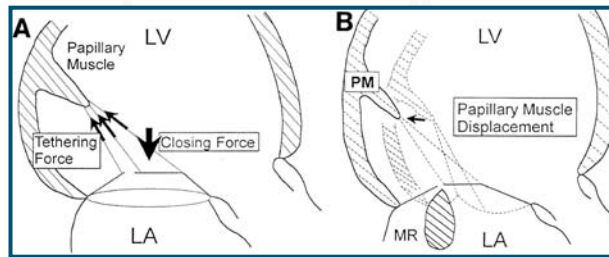


Lancelotti et al. *European Heart Journal* 2005;103:1528-1532

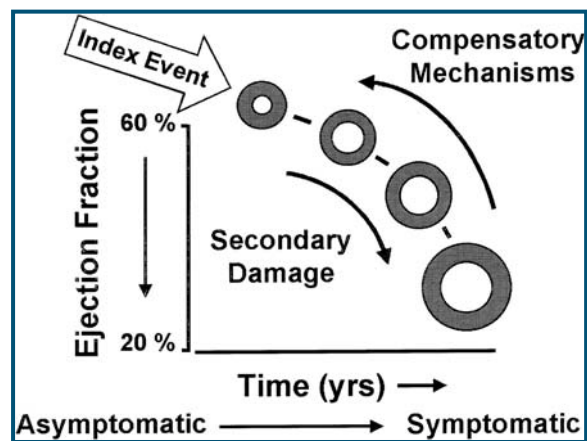
Pathomechanismen

→ Veränderung der LV-Geometrie

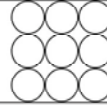
- Verlagerung des subvalvulären Klappenhalteapparates
- Mitralklappenringdilataion
 - Restriktive Klappensegelbewegung



„Circulus vitiosus“



Restriktive Mitralklappenannuloplastik



The Journal of
**THORACIC AND
CARDIOVASCULAR SURGERY**

SURGERY FOR ACQUIRED HEART DISEASE

Early outcome of mitral valve reconstruction in patients with end-stage cardiomyopathy

Steven F. Bolling, MD, G. Michael Deeb, MD, Louis A. Brunsting, MD, David S. Bach, MD

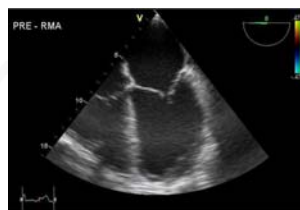
Ann Arbor, Mich.

From the Departments of Thoracic Surgery and Cardiology, the University of Michigan, Ann Arbor, Mich.

→ Mitralklappenrekonstruktion

- Annuloplastik
- Mitralklappenring 2 Größen kleiner

Restriktive Mitralklappenannuloplastik (RMA)

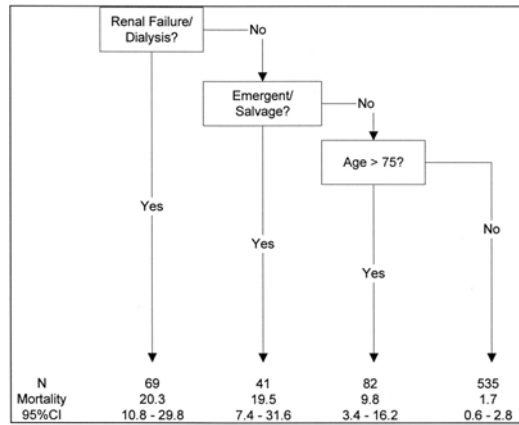


präoperativ



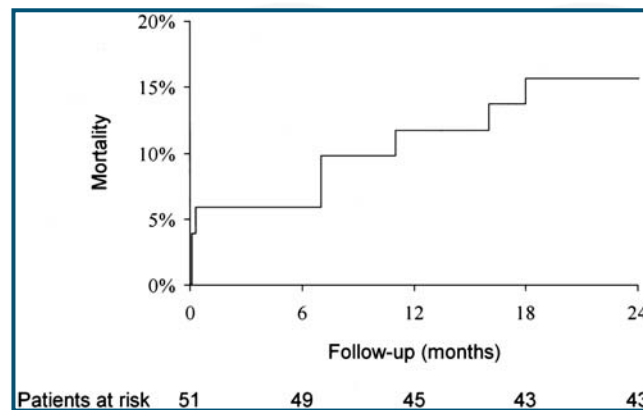
postoperativ

Perioperative Mortalität für RMA



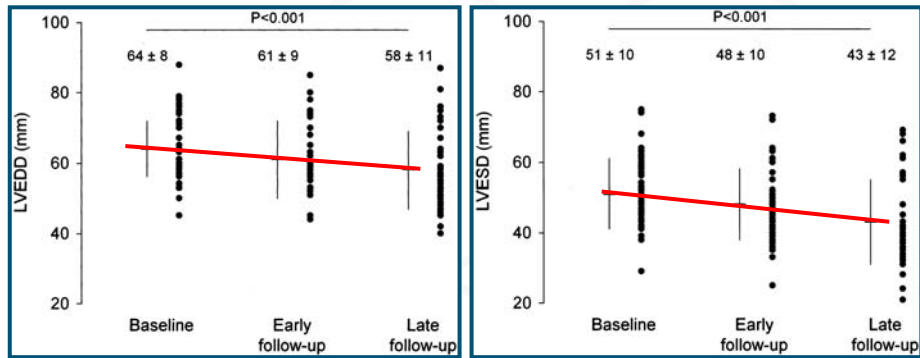
Präoperative EF <30%

Überleben nach RMA



Bax et al. Circulation 2004; 110: I1103-8

„Reverse Remodeling“ nach RMA



Zusammenfassung

→ RMA

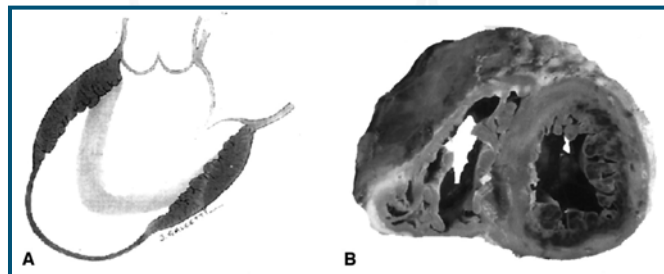
- Perioperatives Risiko
- Langzeitüberleben
- „reverse remodeling“



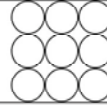
Rekonstruktion der Ventrikelgeometrie

→ Herzinsuffizienz

- 5 Mio. Menschen in den USA
 - KHK verantwortlich für 66%
 - Myokardinfarkt mit Ventrikeldilatation

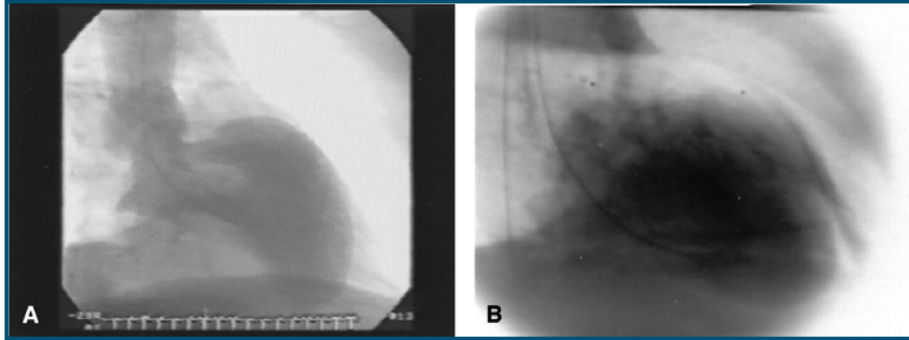


Dyskinesie → Akinesie

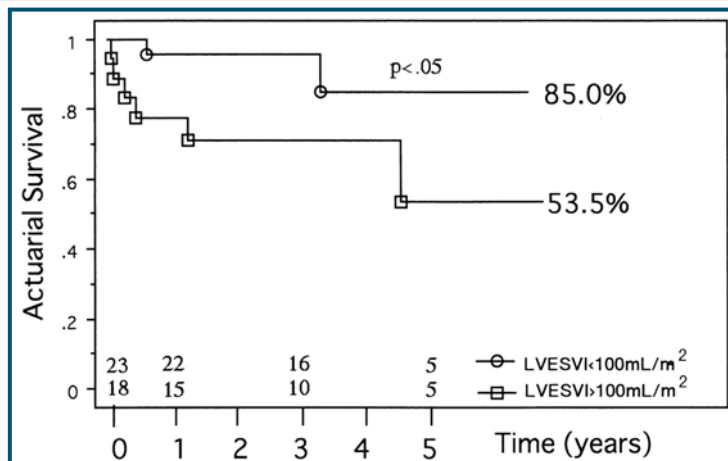


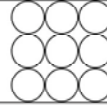
1993 (EF 37%)

2000 (EF 14%)



LV-Volumen & Überleben

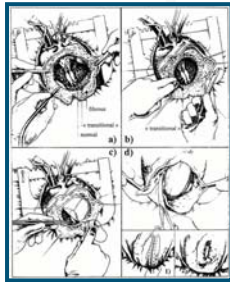




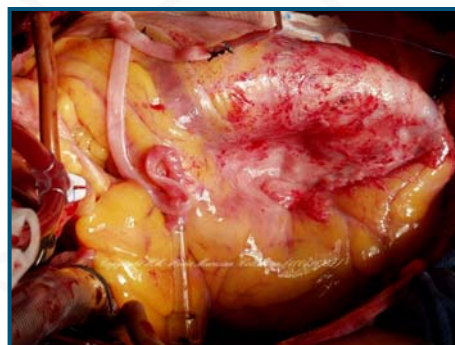
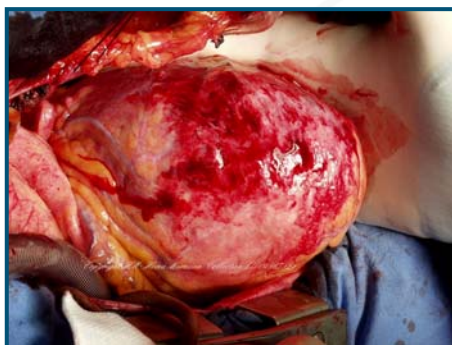
The Journal of
Cardiovasc Surg

Interest of physiological closure (circumferential plasty on contractive areas) of left ventricle after resection and endocardectomy for aneurysm or akinetic zone. Comparison with classical technique about a series of 209 left ventricular resections.

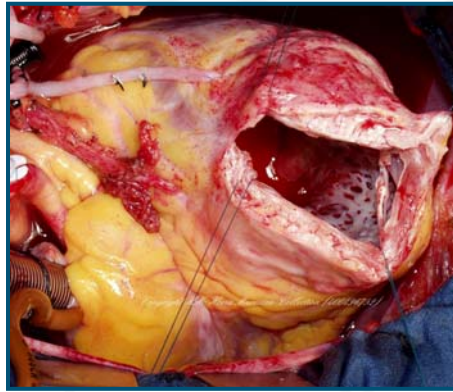
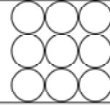
Dor V, Kreitmann P, Jourdan J, et al.



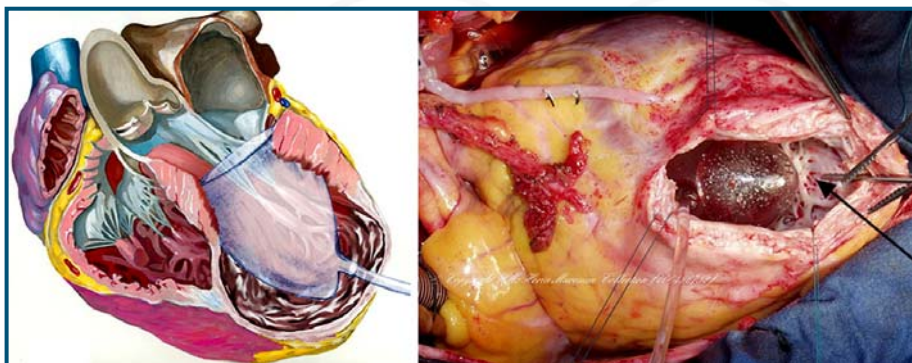
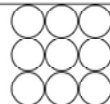
Ventrikelaneurysma



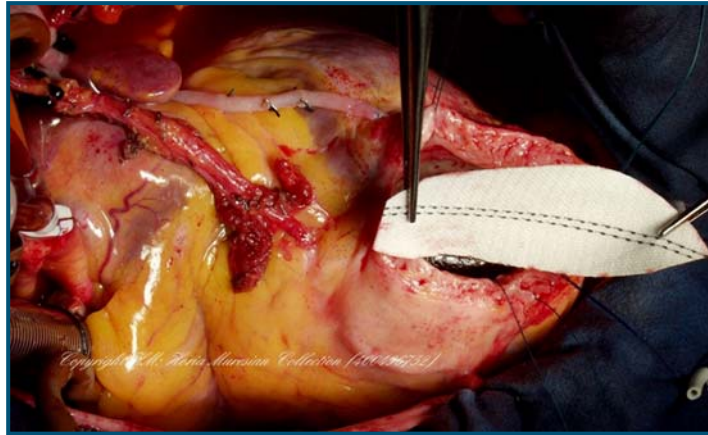
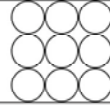
DOR-Plastik



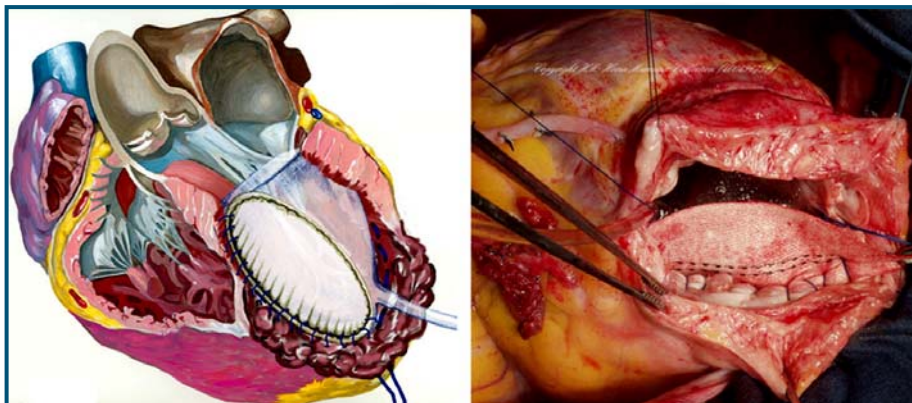
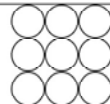
DOR-Plastik



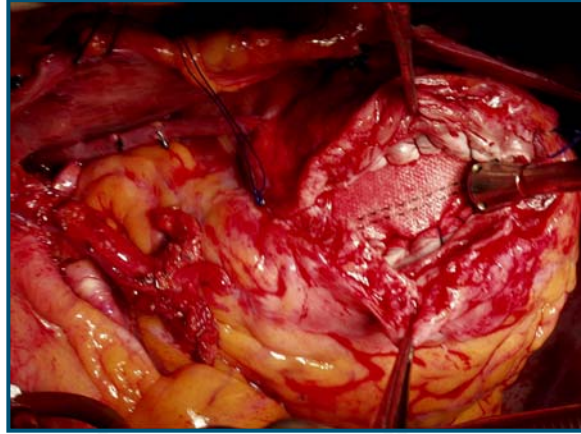
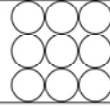
DOR-Plastik



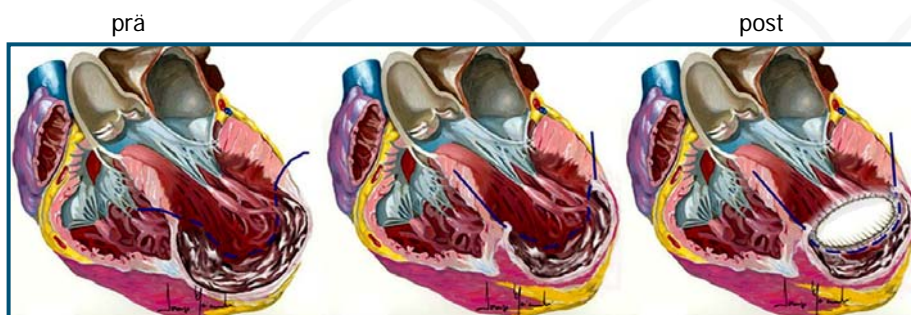
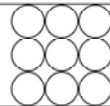
DOR-Plastik



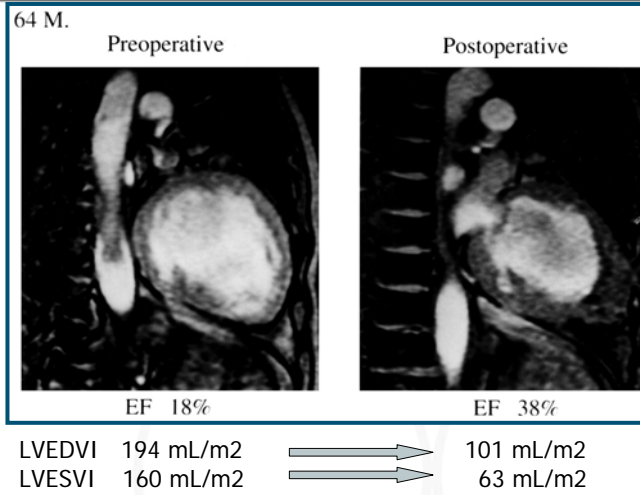
DOR-Plastik



DOR-Plastik



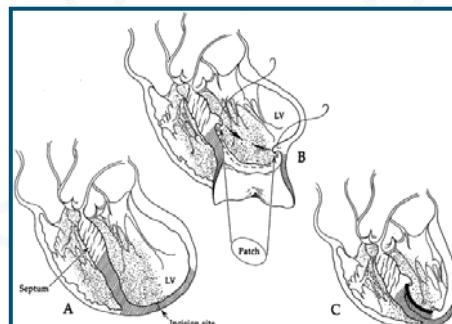
MR-Ventrikulographie



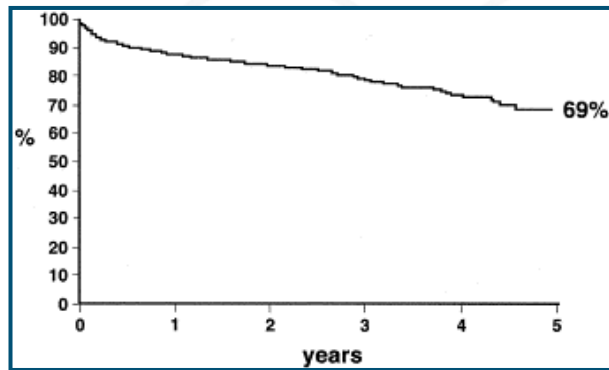
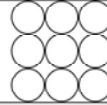
RESTORE-group

RESTORE = Reconstructive Endoventricular Surgery returning Torsion Original Radius Elliptical shape to the left ventricle

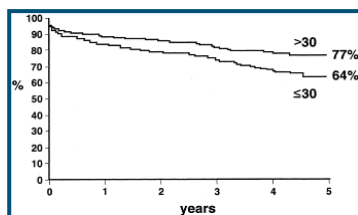
- N=1198 Patienten nach VWI
- 30 Tage Letalität 5.3%
 - EF 29.6% → EF 39.5%



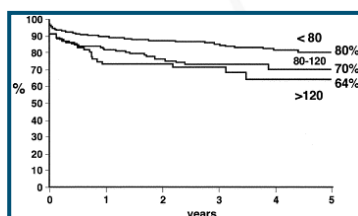
Restore - Langzeitüberleben



Einflussgrößen

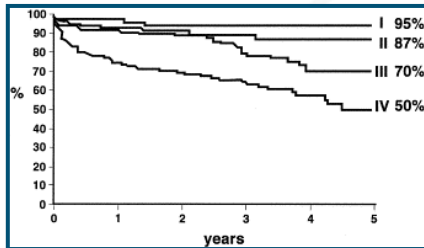


→ EF < 30%



→ LVESVI > 80ml/m²

Einflussgrößen



→ NYHA – Klasse

→ Alter >75Jahre

Zusammenfassung

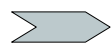
→ Ventrikelgeometrie



LV-Funktion



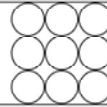
Perioperative Mortalität und Morbidität



Gutes Langzeitergebnis

Der Zeitpunkt bestimmt das Ergebnis

Schlussfolgerung



Mitralklappenrekonstruktion &
Rekonstruktion der Ventrikelgeometrie



chirurgischen Therapie der
chronischen Herzinsuffizienz

Effektive Zusammenarbeit und gemeinsame
Therapieplanung zwischen
Kardiologen und Kardiochirurgen führt zum Erfolg