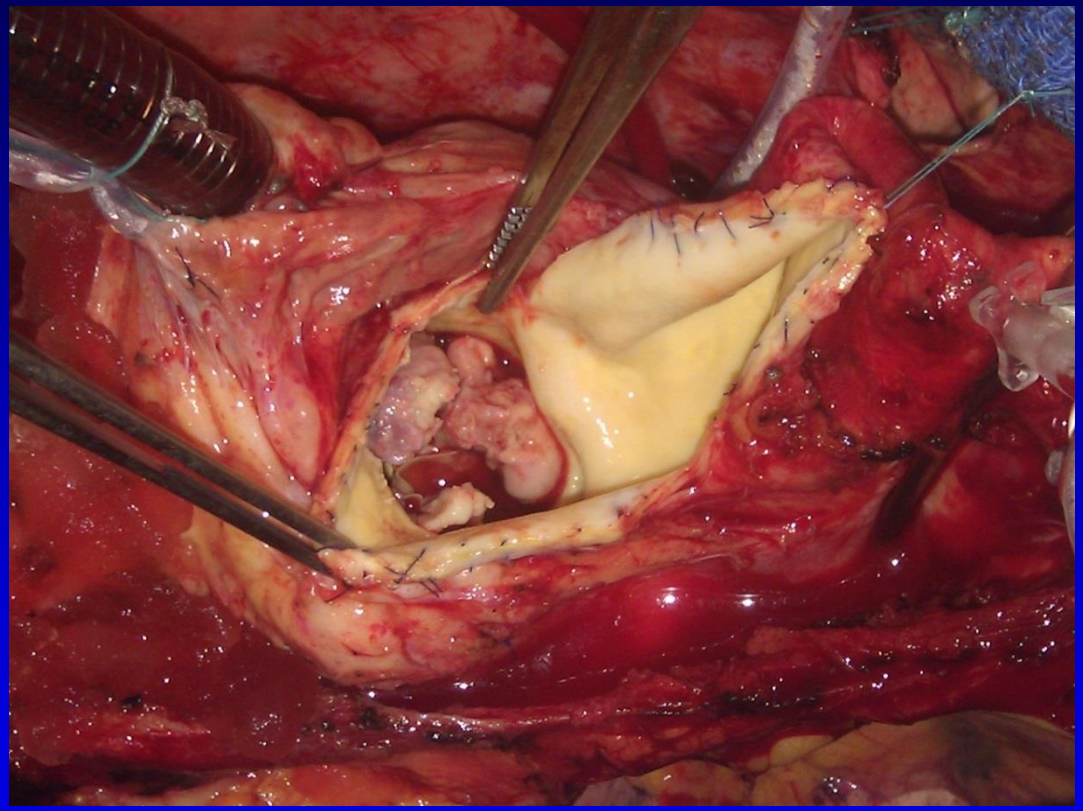
Endocardite infectieuse: Principes chirurgicaux



Erwan Flécher, Rennes.

Cours DESC Maladies Infectieuses, Octobre 2020

Indications chirurgicales

European Heart Journal (2015) 36, 3075–3123
doi:10.1093/eurheartj/ehv319
ESC GUIDELINES

2015 ESC Guidelines for the management of infective endocarditis

Table 22 Indications and timing of surgery in left-sided valve infective endocarditis (native valve endocarditis and prosthetic valve endocarditis)

Indications for surgery	Timing[a]	Class[b]	Level[c]	Ref.[d]
1. Heart failure				
Aortic or mitral NVE or PVE with severe acute regurgitation, obstruction or fistula causing refractory pulmonary oedema or cardiogenic shock	Emergency	I	B	111,115, 213,216
Aortic or mitral NVE or PVE with severe regurgitation or obstruction causing symptoms of HF or echocardiographic signs of poor haemodynamic tolerance	Urgent	I	B	37,115, 209,216, 220,221
2. Uncontrolled infection				
Locally uncontrolled infection (abscess, false aneurysm, fistula, enlarging vegetation)	Urgent	I	B	37,209, 216
Infection caused by fungi or multiresistant organisms	Urgent/ elective	I	C	
Persisting positive blood cultures despite appropriate antibiotic therapy and adequate control of septic metastatic foci	Urgent	IIa	B	123
PVE caused by staphylococci or non-HACEK gram-negative bacteria	Urgent/ elective	IIa	C	
3. Prevention of embolism				
Aortic or mitral NVE or PVE with persistent vegetations >10 mm after one or more embolic episode despite appropriate antibiotic therapy	Urgent	I	B	9,58,72, 113,222
Aortic or mitral NVE with vegetations >10 mm, associated with severe valve stenosis or regurgitation, and low operative risk	Urgent	IIa	B	9
Aortic or mitral NVE or PVE with isolated very large vegetations (>30 mm)	Urgent	IIa	B	113
Aortic or mitral NVE or PVE with isolated large vegetations (>15 mm) and no other indication for surgery[e]	Urgent	IIb	C	

Traitement Chirurgical

A Instabilité hémodynamique
Insuffisance aortique et/ou mitrale massive, instable sous inotrope
Rupture d'une fistule dans une cavité cardiaque ou dans le péricarde
B Sepsis non-controlé
Sepsis non-controlé malgré traitement antibiotique adapté
Endocardite fongique, germes multi-résistants
C Lésions intracardiaques
Abcès, faux-anévrysme
Fistule intracardiaque, troubles de la conduction
D Prévention du risque embolique
Végétation > 15mm, mobile, variation de taille de la végétation
E Valve prothétique
Désinsertion et/ou dysfonction valvulaire
Abcès péri-valvulaire

Apprécier le risque opératoire

Quid des scores?

EuroSCORE II underestimates mortality after cardiac surgery for infective endocarditis

Soléne Patrat-Delon[a], Adrien Rouxel[b], Arnaud Gacouin[a], Matthieu Revest[a], Erwan Flécher[c], Olivier Fouquet[d], Yves Le Tulzo[a], Nicolas Lerolle[b], Pierre Tattevin[a] and Jean-Marc Tadié[a,*]

Assessment of perioperative mortality risk in patients with infective endocarditis undergoing cardiac surgery: performance of the EuroSCORE I and II logistic models

Sérgio Madeira[a,*], Ricardo Rodrigues[b], António Tralhão[a], Miguel Santos[a], Carla Almeida[a], Marta Marques[c], Jorge Ferreira[a], Luís Raposo[a], José Neves[c] and Miguel Mendes[a]

ORIGINAL RESEARCH

American Heart Association | American Stroke Association

Simple Scoring System to Predict In-Hospital Mortality After Surgery for Infective Endocarditis

Giuseppe Gatti, MD; Andrea Perrotti, MD; Jean-François Obadia, MD, PhD; Xavier Duval, MD, PhD; Bernard Iung, MD; François Alla, MD, PhD; Catherine Chirouze, MD, PhD; Christine Selton-Suty, MD, PhD; Bruno Hoen, MD, PhD; Gianfranco Sinagra, MD, FESC; François Delahaye, MD; Pierre Tattevin, MD; Vincent Le Moing, MD; Aniello Pappalardo, MD; Sidney Chocron, MD, PhD; on behalf of The Association for the Study and Prevention of Infective Endocarditis Study Group–Association pour l'Étude et la Prévention de l'Endocadite Infectieuse (AEPEI)*

International Journal of Cardiology 202 (2016) 960

Contents lists available at ScienceDirect

International Journal of Cardiology

journal homepage: www.elsevier.com/locate/ijcard

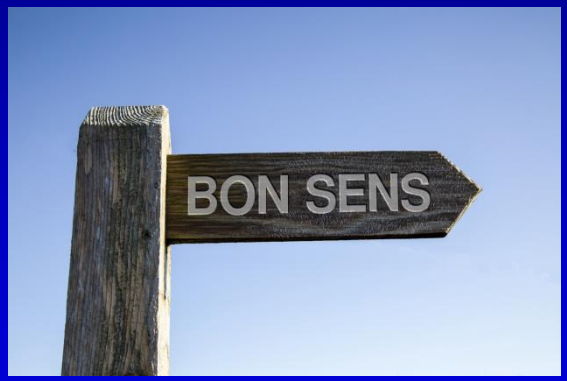
Risk scores for endocarditis surgery: Callout for reporting logistic models

Tom Kai Ming Wang *

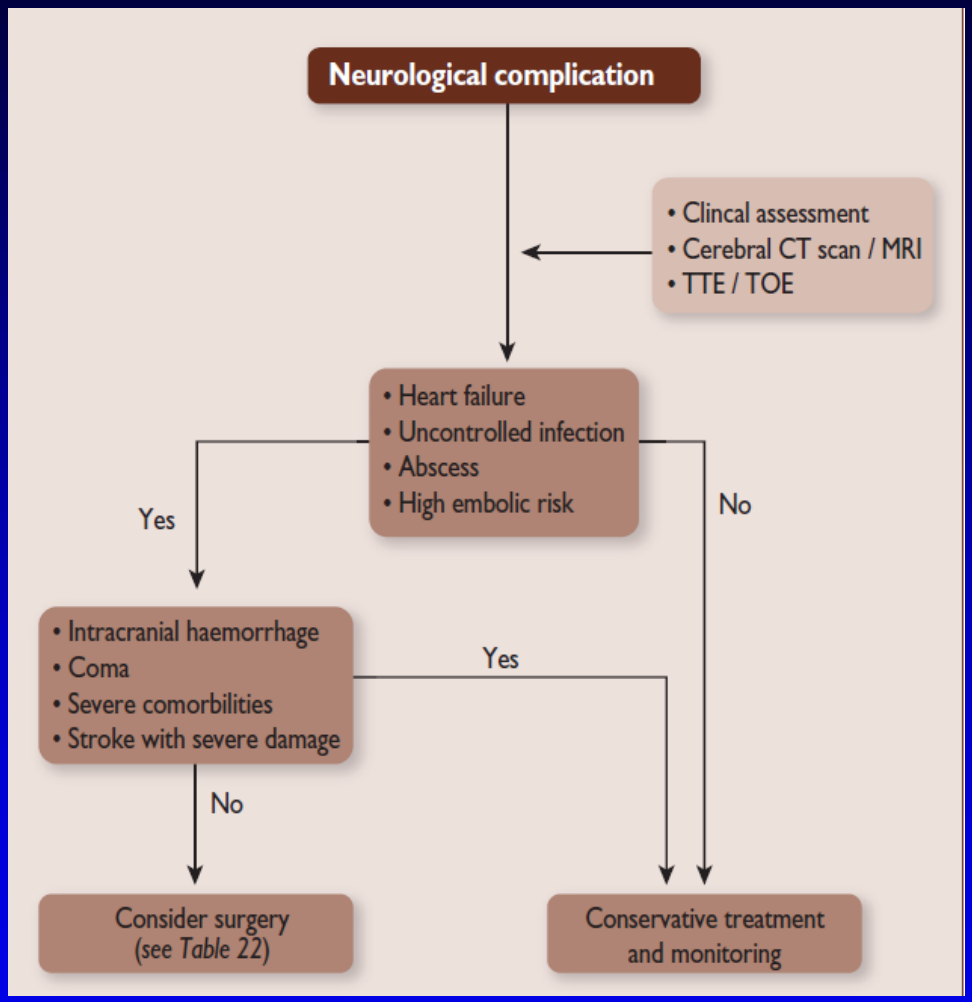
Green Lane Cardiovascular Service, Auckland City Hospital, Auckland, New Zealand

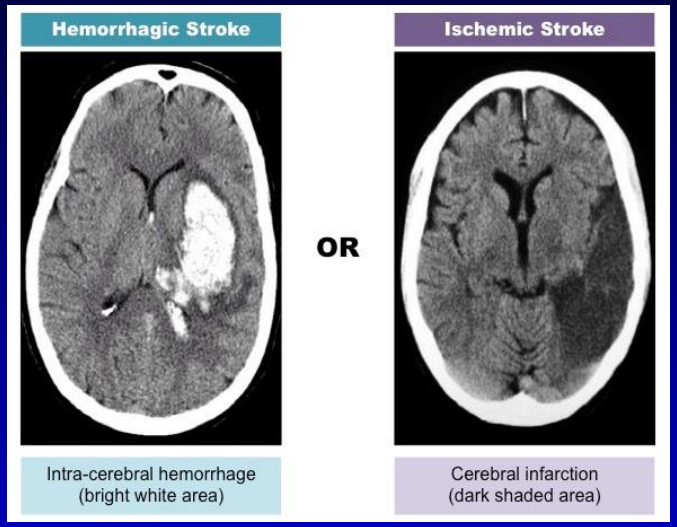
En pratique

1) Voir le malade
2) Du bon sens
3) En équipe



AVC et Chirurgie dans l'endocardite?





•AIT, AVC ischemique sans séquelle majeure

•AVC hémorragique: attendre 4 semaines (si possible…)

The exact role of early surgery in preventing embolic events remains controversial. In the Euro Heart Survey, vegetation size was

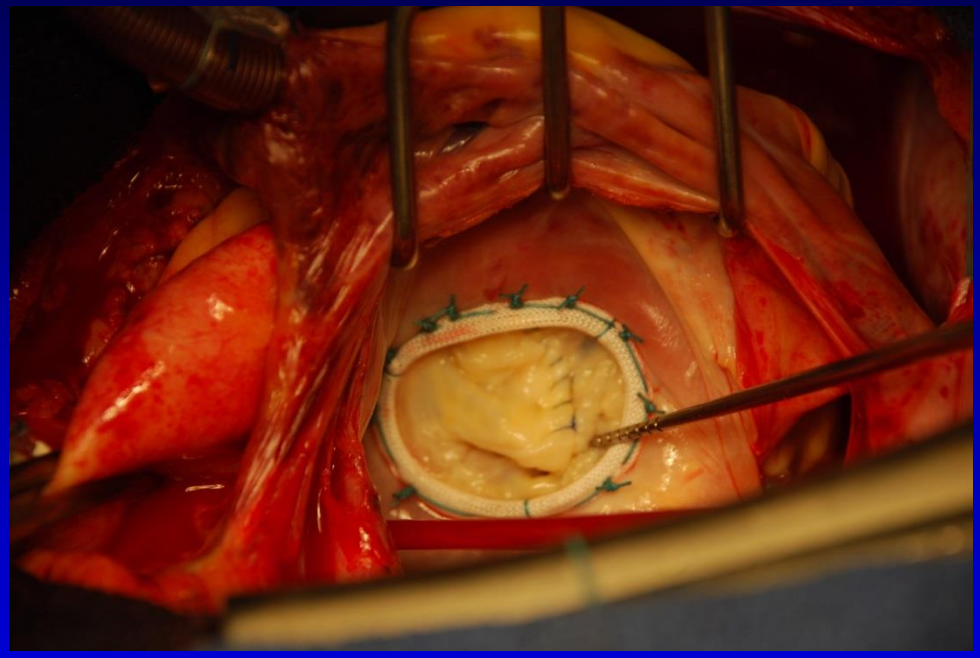
Et la coronarographie?

- Homme > 40 ans
- Femme ménopausée
- Au moins un FDR cardiovasculaire
- ATCD coronaire
- Exceptions: taille Végétation Ao, Urgence vitale
- Place du coroscanner à discuter, mais tachycardie…

Quelle chirurgie?

- Un principe: La résection carcinologique

Plastie ou Remplacement?



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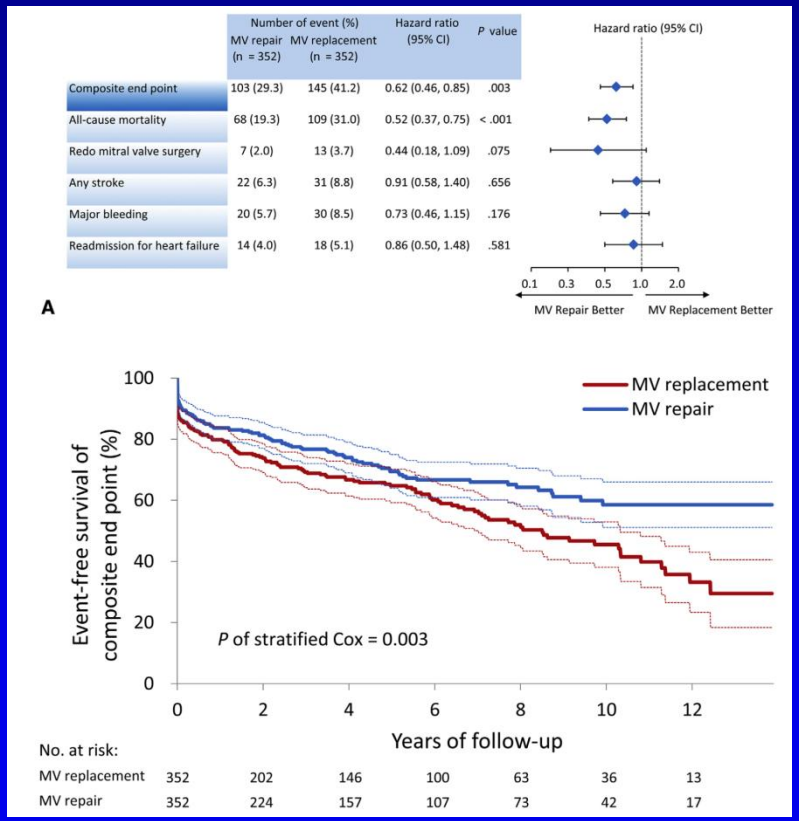
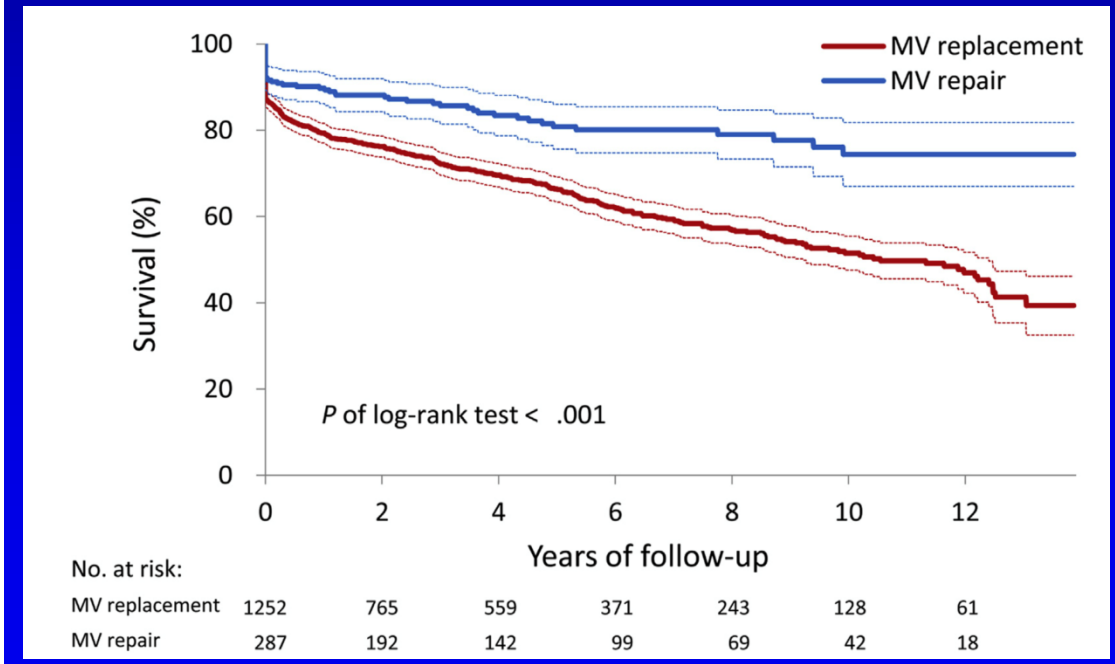
Nationwide cohort study of mitral valve repair versus replacement for infective endocarditis

Hsiu-An Lee, MD,[a] Yu-Ting Cheng, MD,[a] Victor Chien-Chia Wu, MD,[b] An-Hsun Chou, MD, PhD,[c] Pao-Hsien Chu, MD,[b] Feng-Chun Tsai, MD,[a] and Shao-Wei Chen, MD[a,d]

(J Thorac Cardiovasc Surg 2018;156:1473-83)



	Number of event (%) MV repair (n = 352)	MV replacement (n = 352)	Hazard ratio (95% CI)	P value
Composite end point	103 (29.3)	145 (41.2)	0.62 (0.46, 0.85)	.003
All-cause mortality	68 (19.3)	109 (31.0)	0.52 (0.37, 0.75)	< .001
Redo mitral valve surgery	7 (2.0)	13 (3.7)	0.44 (0.18, 1.09)	.075
Any stroke	22 (6.3)	31 (8.8)	0.91 (0.58, 1.40)	.656
Major bleeding	20 (5.7)	30 (8.5)	0.73 (0.46, 1.15)	.176
Readmission for heart failure	14 (4.0)	18 (5.1)	0.86 (0.50, 1.48)	.581



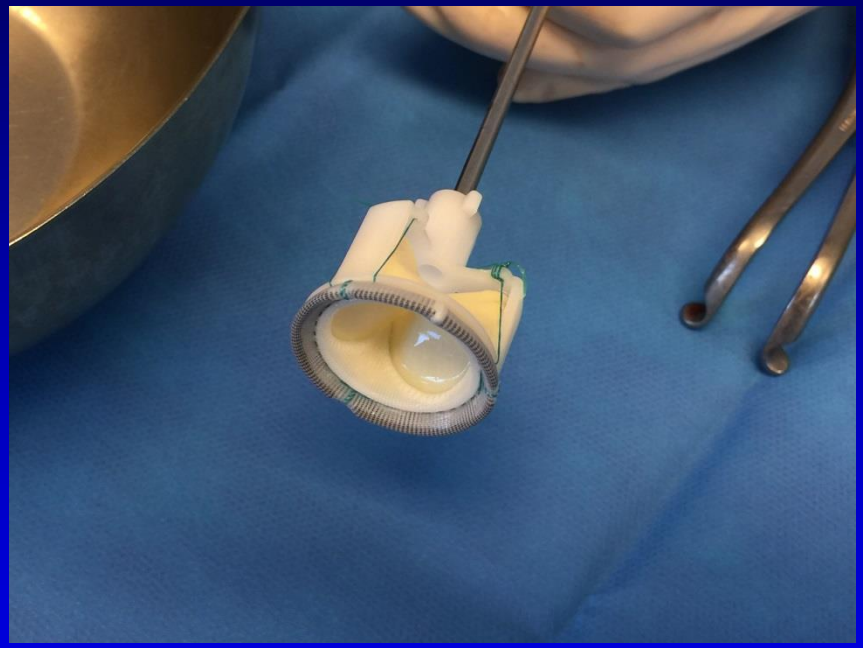
Mitral valve repair versus replacement for infective endocarditis. What is better in the "real world"?

Manuel J. Antunes, MD, PhD, DSc

Central Message

Mitral valve repair is superior to replacement in patients with infective endocarditis and should be pursued, whenever feasible, by surgeons with experience in these procedures and pathology.

Biologique ou Mécanique?



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RESEARCH ARTICLE

The prognosis of infective endocarditis treated with biological valves versus mechanical valves: A meta-analysis

Ende Tao[1¤], Li Wan[1]*, WenJun Wang[1], YunLong Luo[2], JinFu Zeng[1], Xia Wu[1]

1 Department of Cardiovascular Surgery of the First Affiliated Hospital of Nanchang University, Nanchang, Jiangxi, China, **2** Department of Neurosurgery of the First Affiliated Hospital of Nanchang University, Nanchang, Jiangxi, China

International Journal of Cardiology 178 (2015) 117–123

Contents lists available at ScienceDirect

International Journal of Cardiology

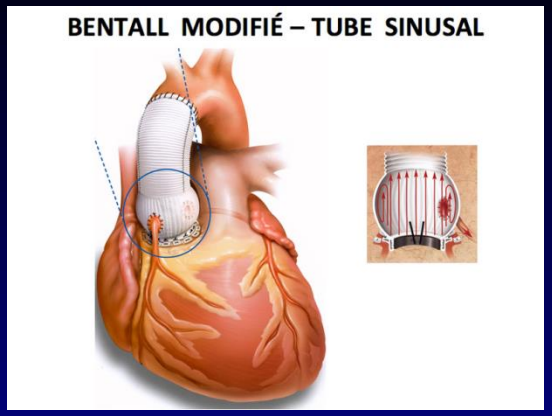
journal homepage: www.elsevier.com/locate/ijcard

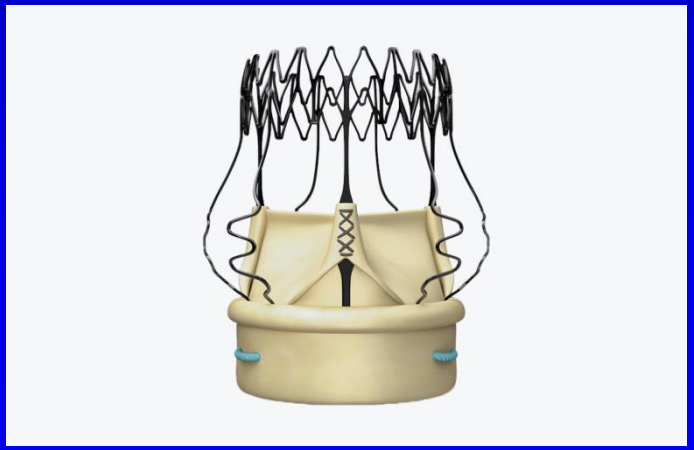
One-year outcome following biological or mechanical valve replacement for infective endocarditis ☆

F. Delahaye [a,*], V.H. Chu [b], J. Altclas [c], B. Barsic [d], A. Delahaye [a], T. Freiberger [e,f], D.L. Gordon [g], M.M. Hannan [h], B. Hoen [i], S.S. Kanj [j], T. Lejko-Zupanc [k], C.A. Mestres [l], O. Pachirat [m], P. Pappas [b], C. Lamas [n], C. Selton-Suty [o], R. Tan [p], P. Tattevin [q], A. Wang [b],
International Collaboration on Endocarditis Prospective Cohort Study (ICE-PCS) Investigators [1]

What else?

- Root replacement
- Xénogreffe
- Homogreffe
- Transplantation
- Et d'autres…





RESEARCH NOTE

Heart transplantation as salvage treatment of intractable infective endocarditis

Marie Aymami[1], Matthieu Revest[2,3], Caroline Piau[4], Céline Chabanne[1], François Le Gall[5], Bernard Lelong[1], Jean-Philippe Verhoye[1], Christian Michelet[2,3,6], Pierre Tattevin[2,3,7] and Erwan Flécher[1]

Et en pratique, au bloc…

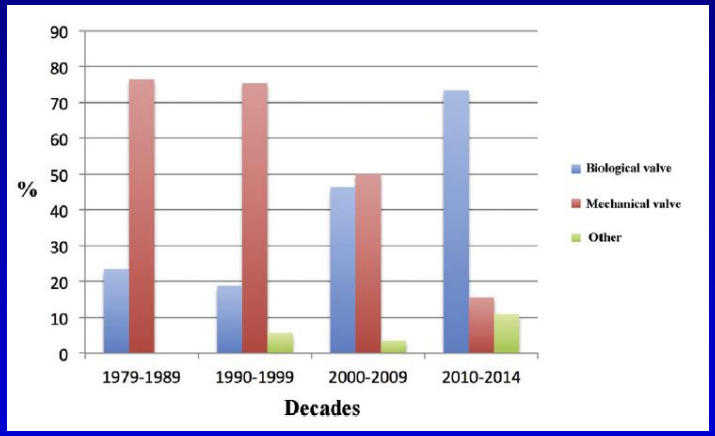
- Installation: scarpa dans le champ opératoire
- **ETO** en place et vérification avant incision
- Canulation bi-cave (abcès, fistule, surprise per op…)
- Matériel chirurgical disponible: patch péricardique, full root, homogreffe exceptionnellement…
- **Parage chirurgical de tous les tissus infectés et … réfléchir à la reconstruction ensuite! (oups!)**
- Prélèvements bactériologiques +++ (direct)
- Protection myocardique: chirurgie longue!

Résultats chirurgicaux

Infective Endocarditis With Paravalvular Extension: 35-Year Experience

Simon Rouzé, MD, Erwan Flécher, MD, PhD, Matthieu Revest, MD, Amedeo Anselmi, MD, Marie Aymami, MD, Antoine Roisné, MD, Julien Guihaire, MD, PhD, and Jean Philippe Verhoye, MD, PhD

Between October 1979 and December 2014, 955 patients underwent an operation for AIE at Rennes University Hospital. Among them, 207 had severe tissue destruction and confirmed paravalvular extension. The patients were



Postoperative Outcomes

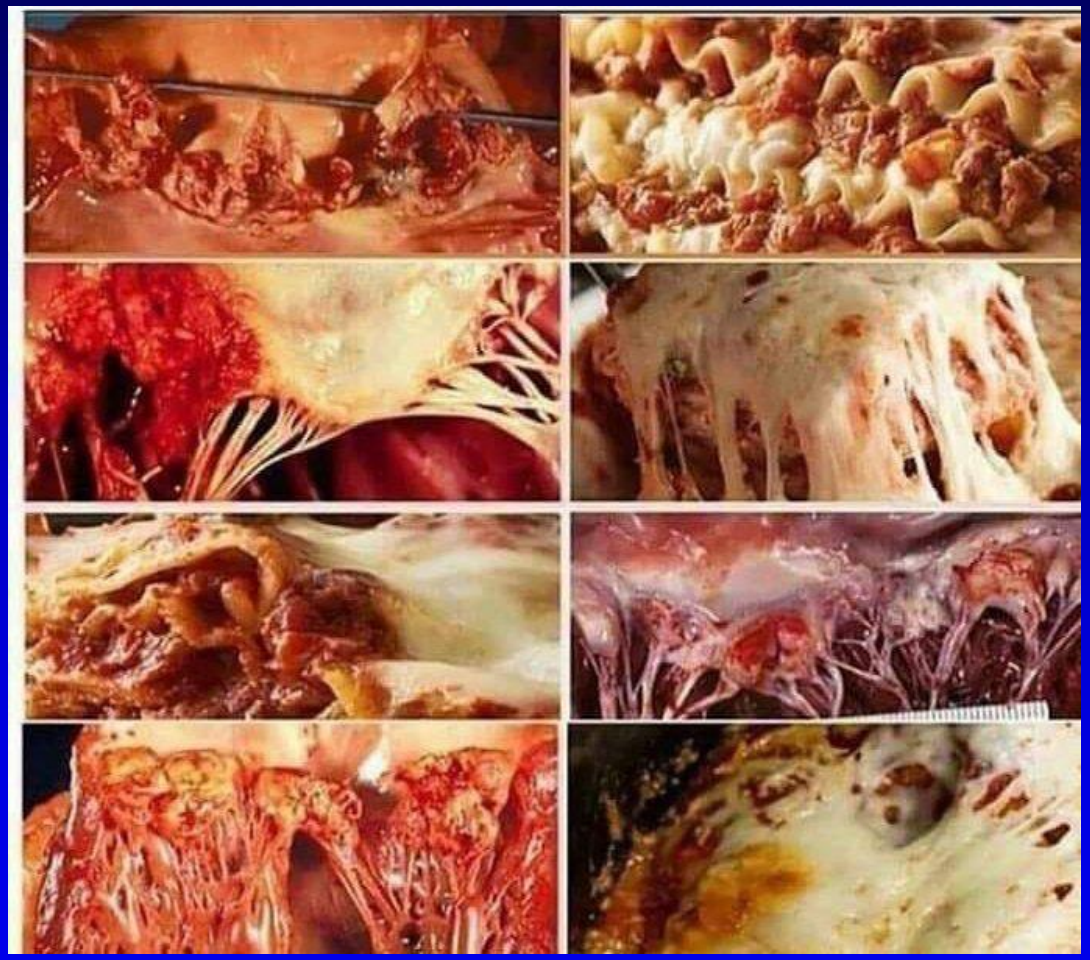
The operative mortality of the cohort was 16% (n = 34).

In conclusion, AIE complicated by paravalvular involvement remains a surgical challenge. Valve replacement (particularly using bioprosthesis) associated with ad hoc reconstruction seems to be a reliable option and showed very encouraging results in this context.

Conclusions

- Opérer: à temps
- Décider: en équipe
- Retirer tout les tissus infectés
- Plastie si possible
- Prothèse selon contexte (Biologique si grave)
- Centres experts et Chirurgiens seniors

Merci de votre attention



Lasagnes ou endocardite?