MITRACLIP per la correzione percutanea dell'insufficienza mitralica funzionale e degenerativa

15 marzo 2016

Serata con i medici di Medicina Generale

Classificazione dell'insufficienza mitralica (IM)

Organica **(primitiva o degenerativa, DMR)**

Funzionale **(secondaria, FMR)**

(FMR) è caratterizzata da una disfunzione valvolare in assenza di lesioni anatomiche dell'apparato valvolare; in questo caso il rigurgito è secondario al rimodellamento ventricolare, sia globale che regionale

Patologia degenerativa della valvola mitrale

Rottura delle corde tendinee
Prolasso di un segmento isolato dei lembi mitralici
Prolasso diffuso di uno o entrambi i lembi mitralici

Patogenesi

Esiti malattia reumatica
Deficienza fibroelastica
Malattia di Barlow
Sindrome di Marfan

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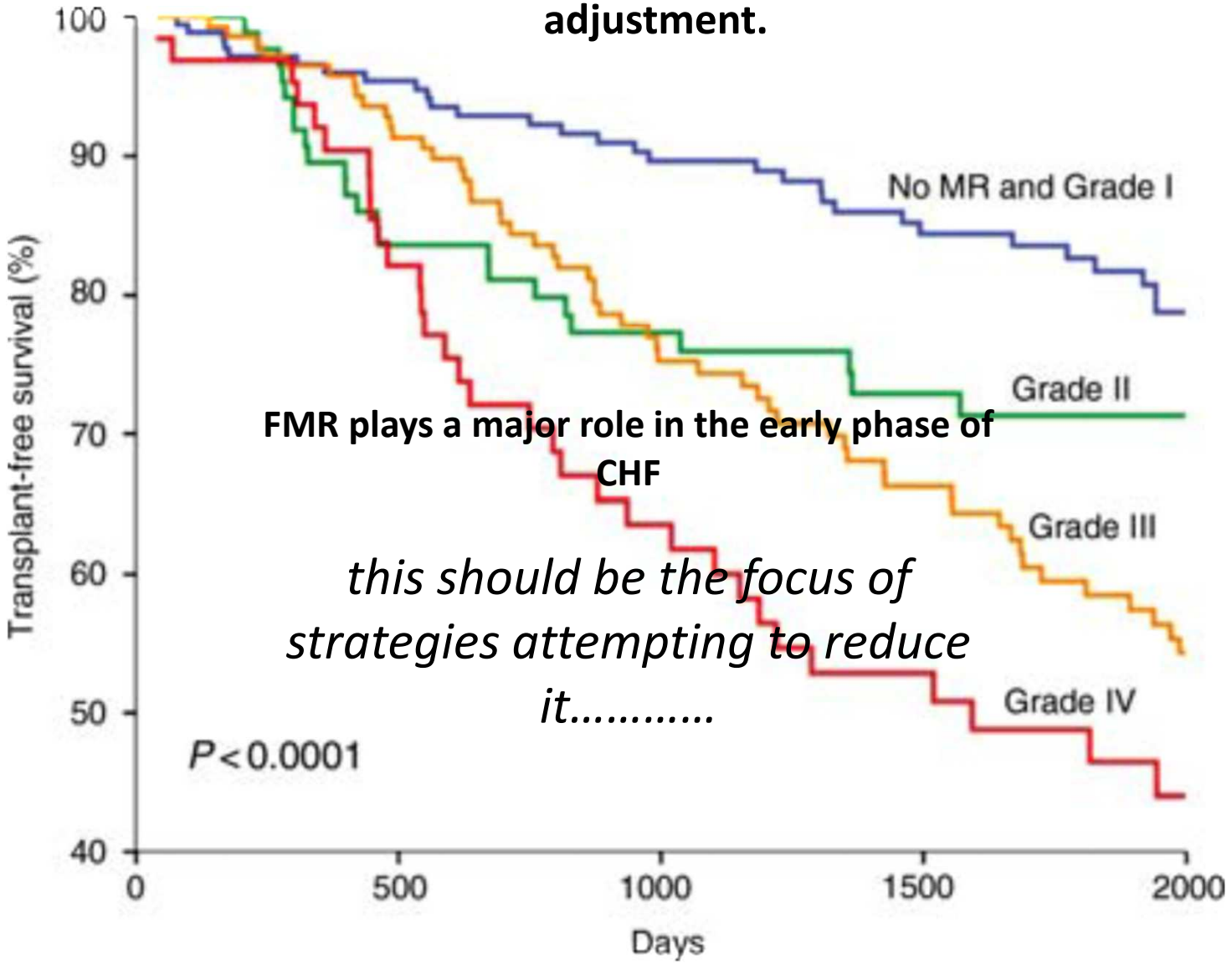
Table 3 Univariate regression analysis for death and heart transplant in patients in the highest quartile of risk (higher risk) and in the remainder (not higher risk) based on a propensity score model

	HR	95% CI	P
Higher risk patients			
No FMR or Grade I (referent group)	1		
FMR Grade II	0.99	0.47–2.06	0.977
FMR Grade III	1.43	0.76–2.67	0.267
FMR Grade IV	1.66	0.83–3.32	0.154
Not higher risk patients			
No FMR or Grade I (referent group)	1		
FMR Grade II	1.22	0.65–2.30	0.527
FMR Grade III	2.41	1.47–3.94	0.0004
FMR Grade IV	3.55	2.00–6.30	<0.0001

Eur J Heart Fail 2010;12:382–388

Association between FMR and long-term risk of death and heart transplant after multivariable adjustment.

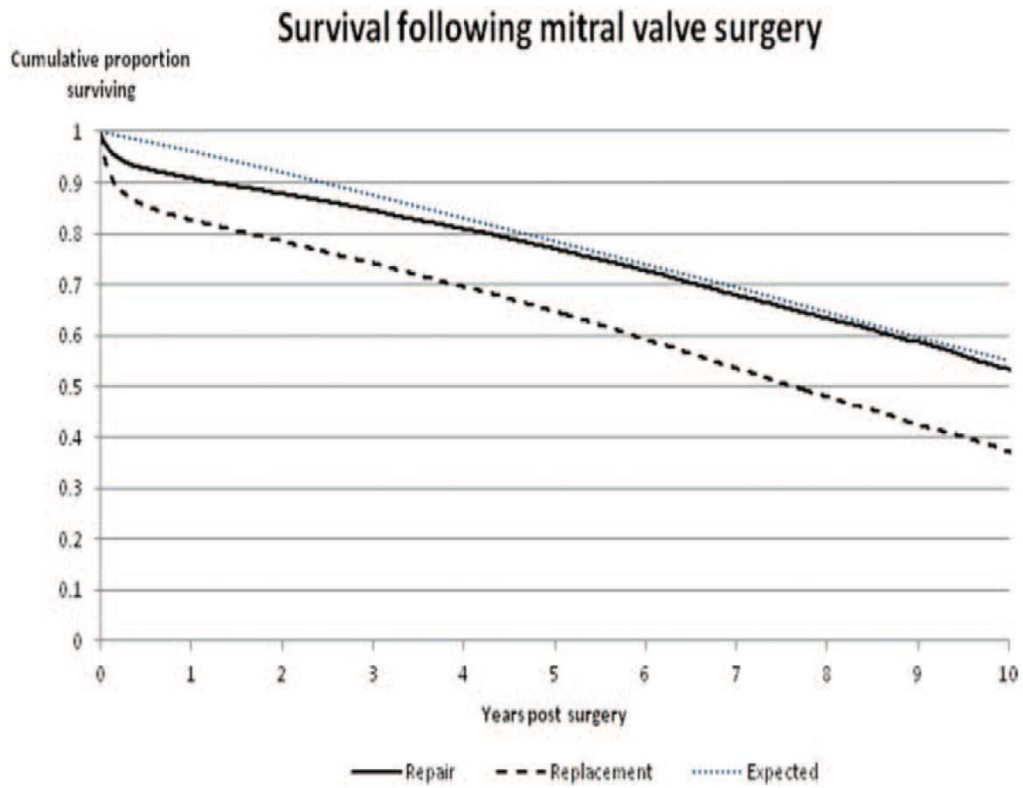


FMR plays a major role in the early phase of CHF

this should be the focus of strategies attempting to reduce it……

Eur J Heart Fail 2010;12:382

La riparazione chirurgica è superiore alla sostituzione valvolare



Vassileva et al. Long-term survival of patients undergoing mitral valve repair and replacement**: a longitudinal analysis of Medicare fee-for-service beneficiaries. Circulation. 2013** May 7;127(18):1870-6.

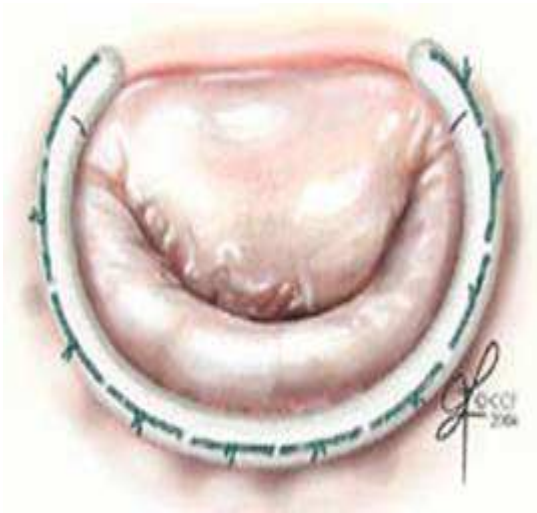
47 279 pazienti Medicare ≥65 anni

Mortalitá operatoria 3.9% dopo plastica della mitrale e 8.9% dopo sostituzione mitralica

Vassileva et al. Long-term survival of patients undergoing mitral valve repair and replacement: a longitudinal analysis of Medicare fee-for-service beneficiaries. Circulation. 2013 May 7;127(18):1870-6.

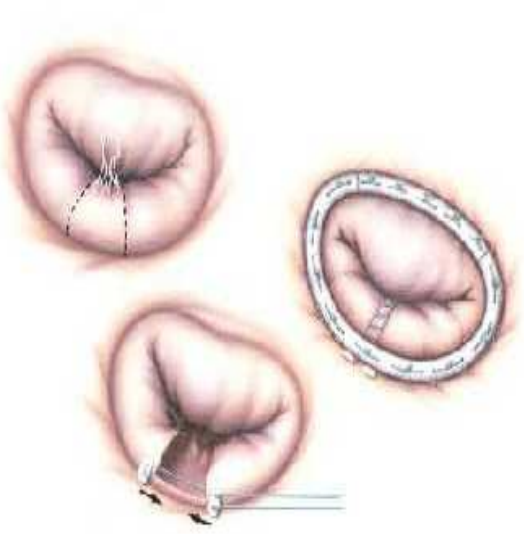
Interventi riparativi della valvola mitrale

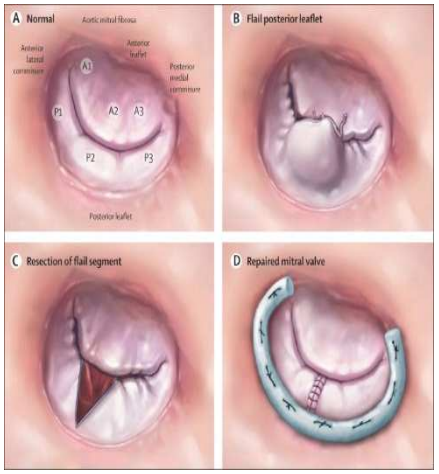
Annuloplastia (rimodellamento anatomico e ripristino della fisiologica funzione valvolare)



Interventi riparativi della valvola mitrale

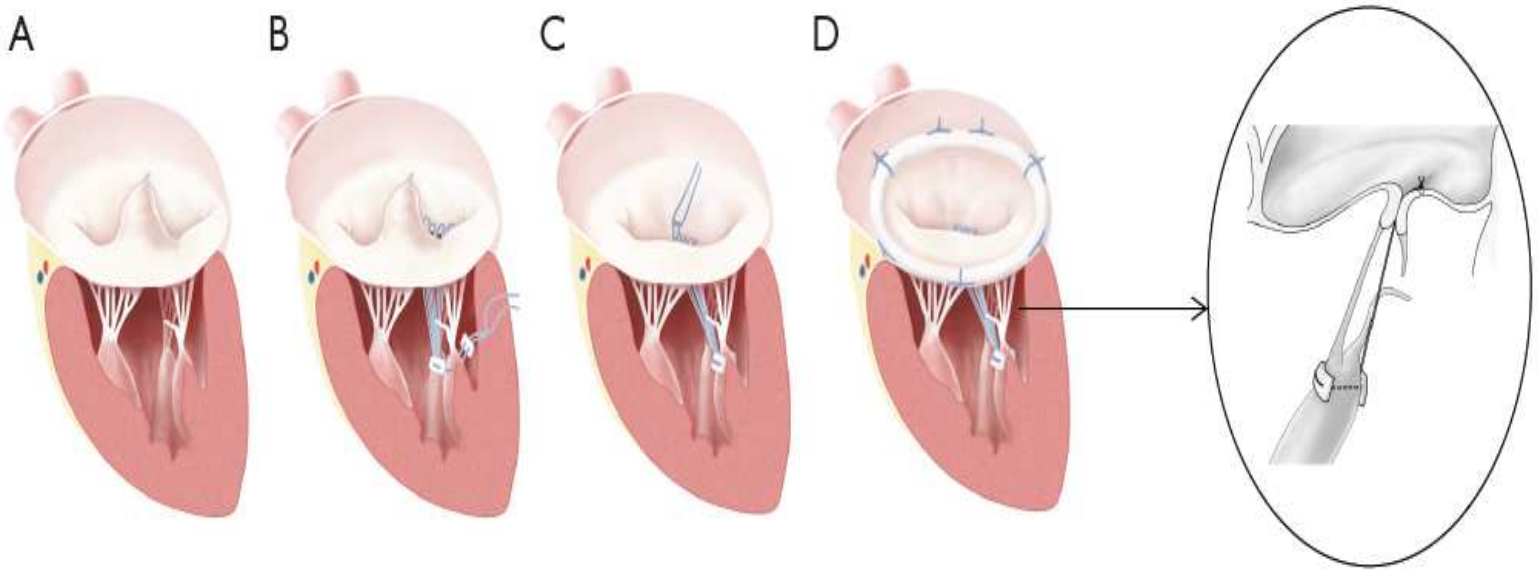
Resezione rettangolare or triangolare del lembo





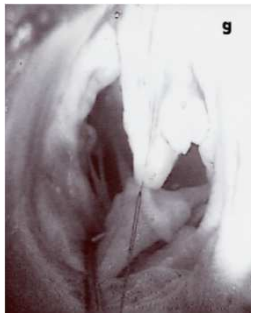
Interventi riparativi della valvola mitrale

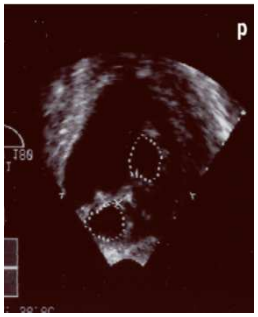
Impianto di corde artificiali

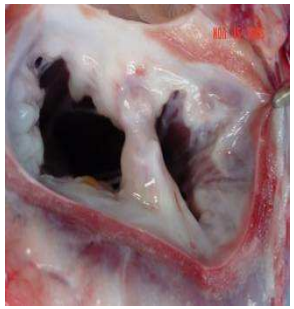


La tecnica edge-to-edge di Alfieri

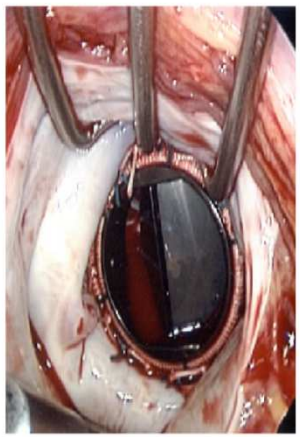
La tecnica di valvulopastica “edge-to-edge” é stata popolarizzata Alfieri negli anni ’90



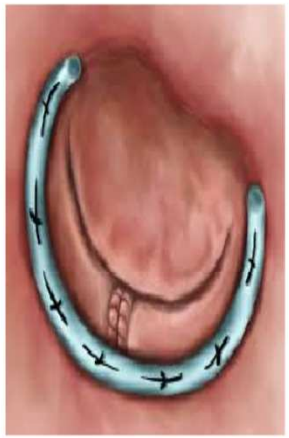




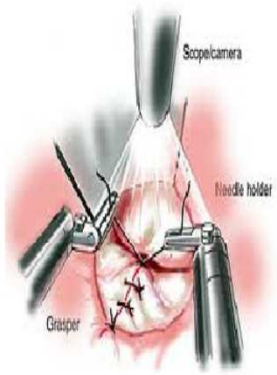
Le attuali tecniche percutanee e minimamente invasive per il trattamento dell'insufficienza mitralica sono basate sugli stessi principi delle tecniche chirurgiche convenzionali



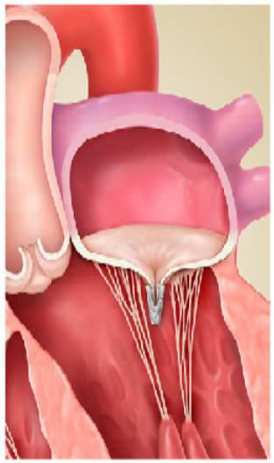
Sostituzione protesica



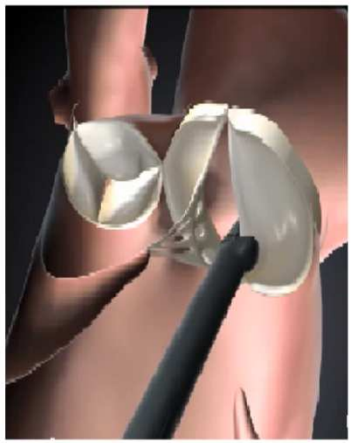
Riparazione



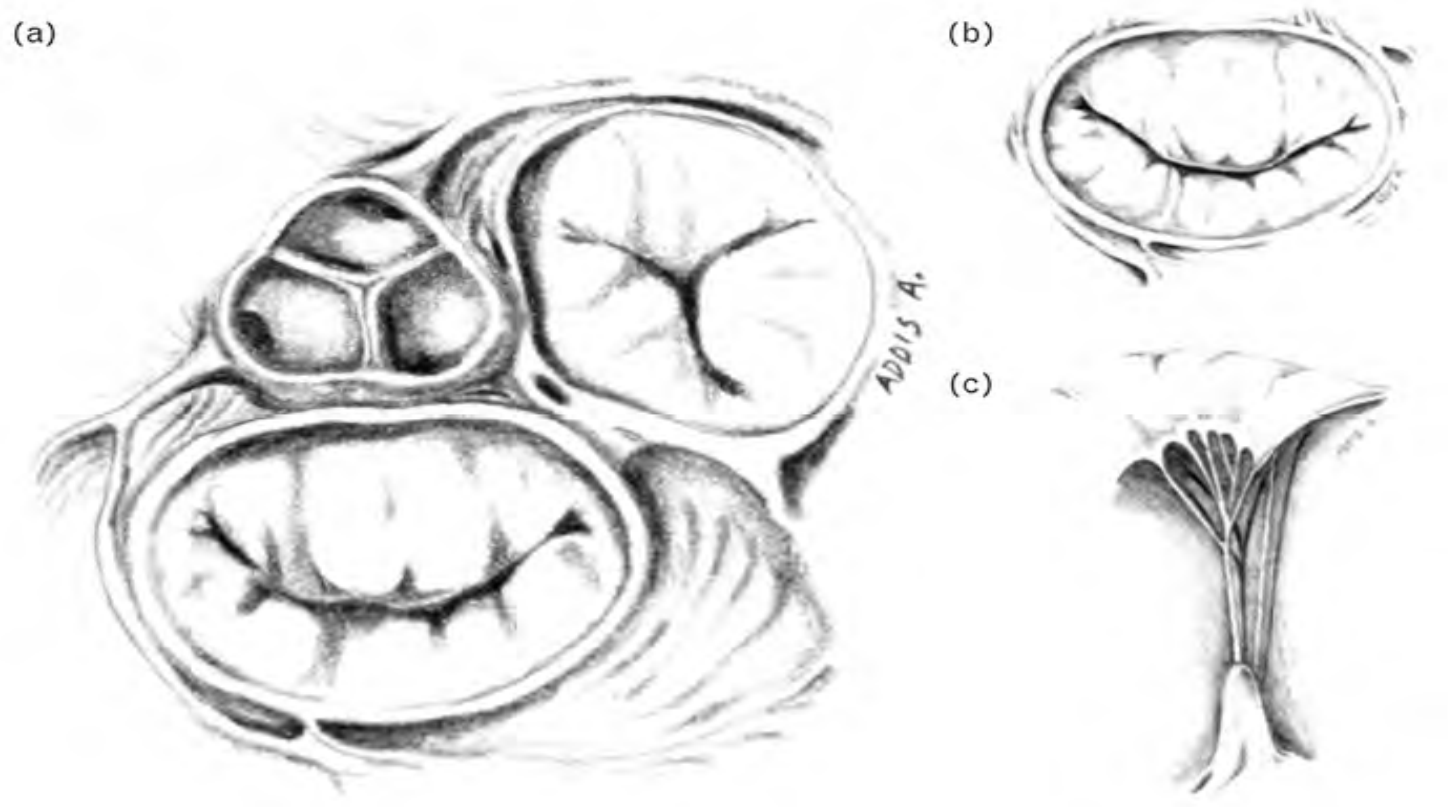
Riparazione robotica



Mitraclip

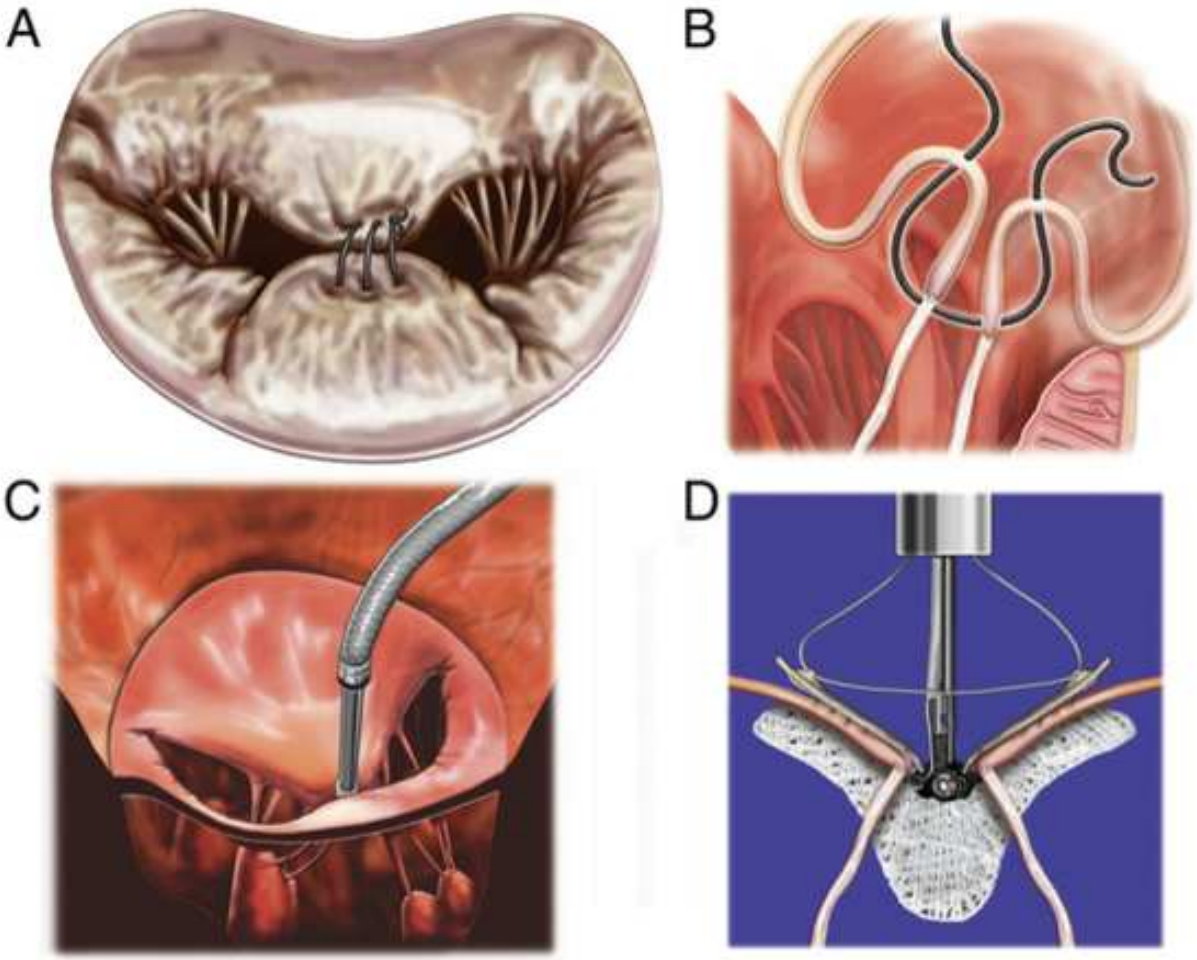


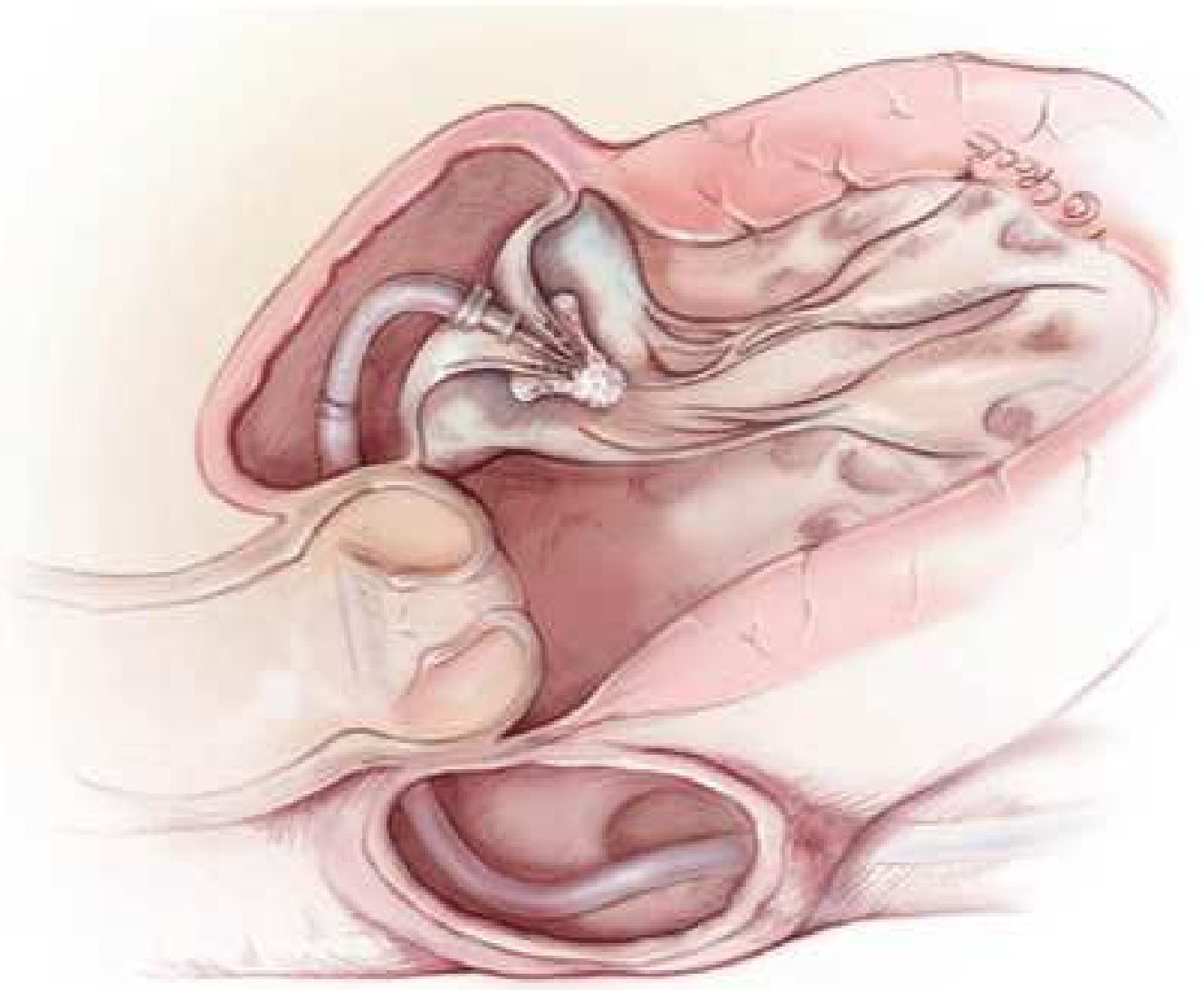
Riparazione off-pump

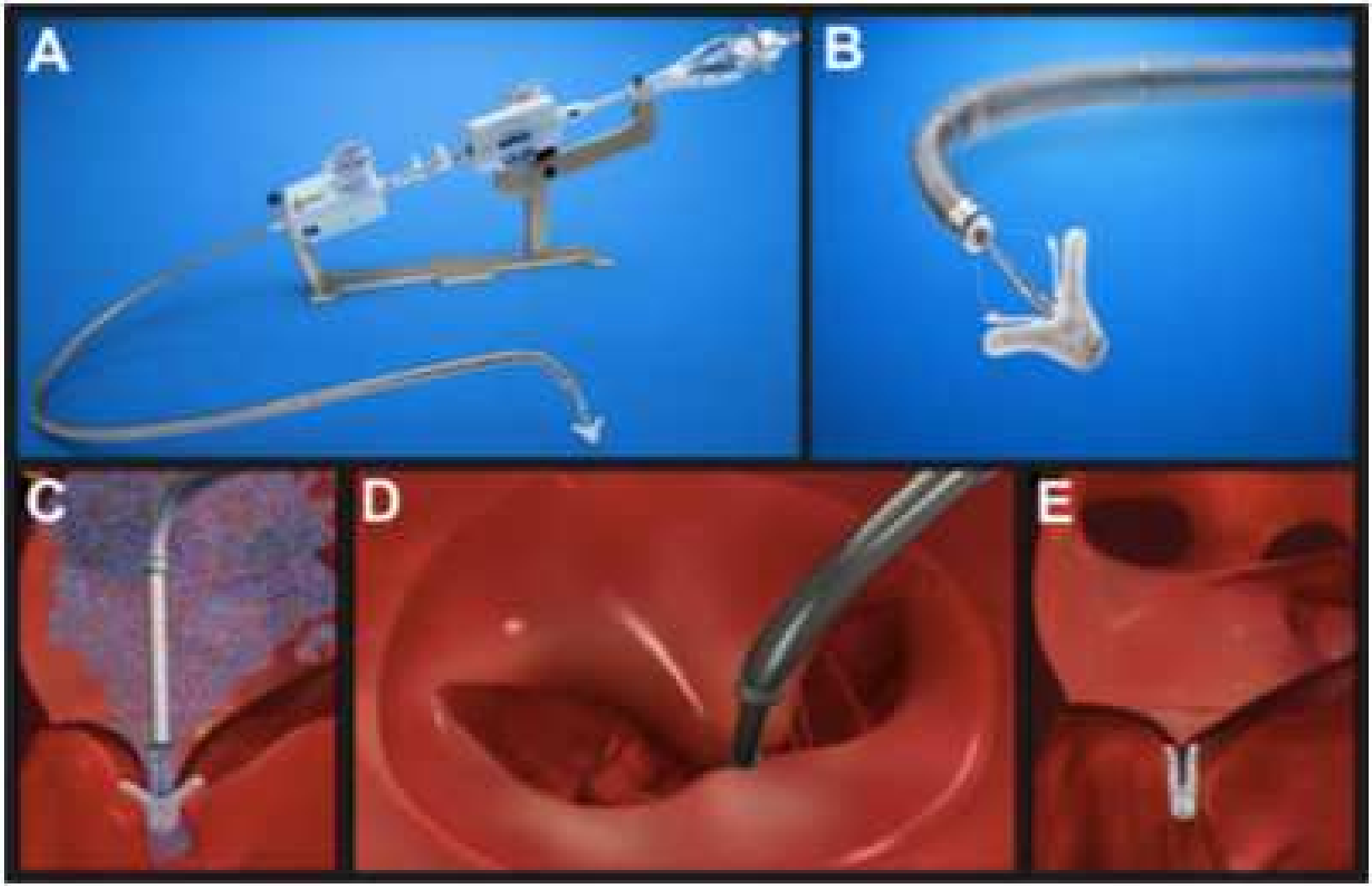


Device per uso interventistico percutaneo, per via venosa e con puntura trans-settale per la riparazione della valvola mitralica con metodica edge-to-edge, in alternativa alla chirurgia tradizionale, nell'IM funzionale e degenerativa

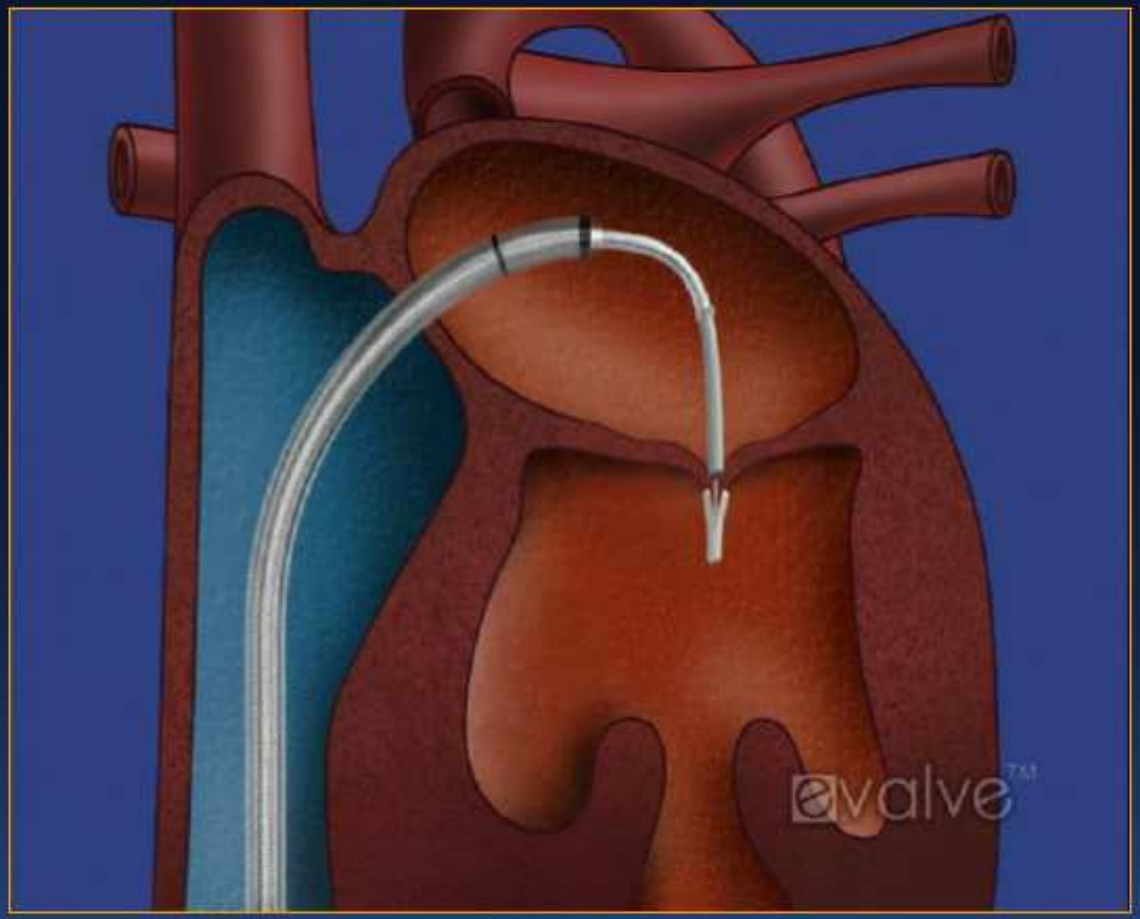
Surgical Edge-to-Edge Technique Versus MitraClip

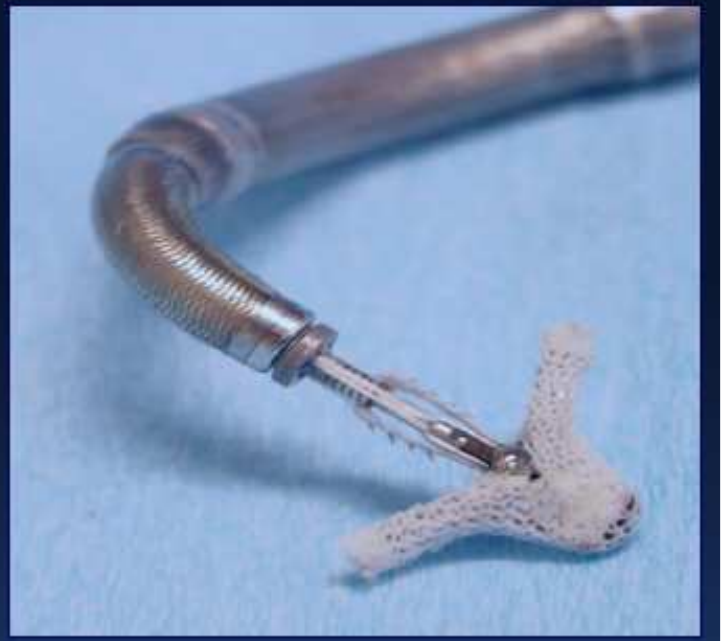


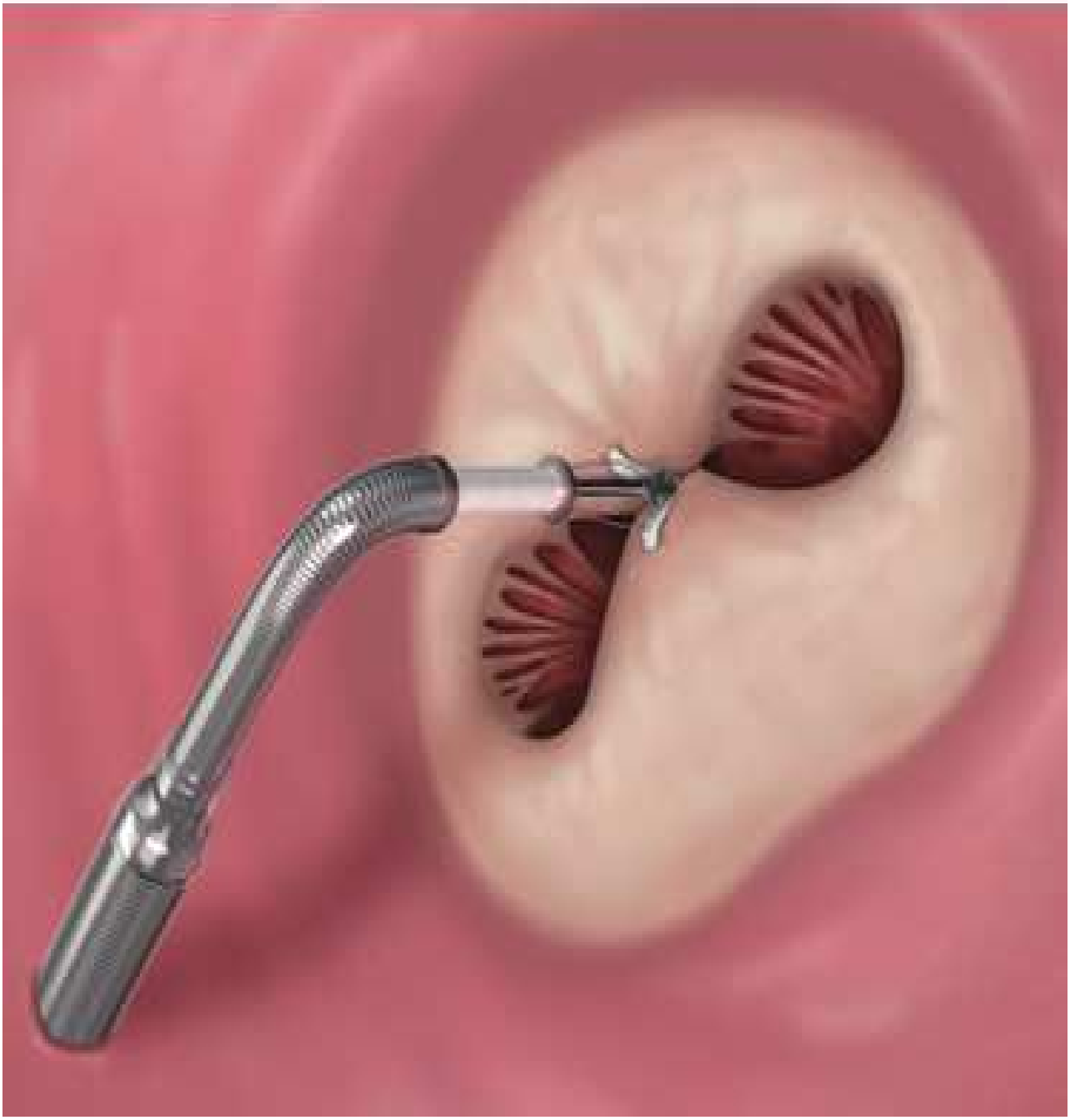


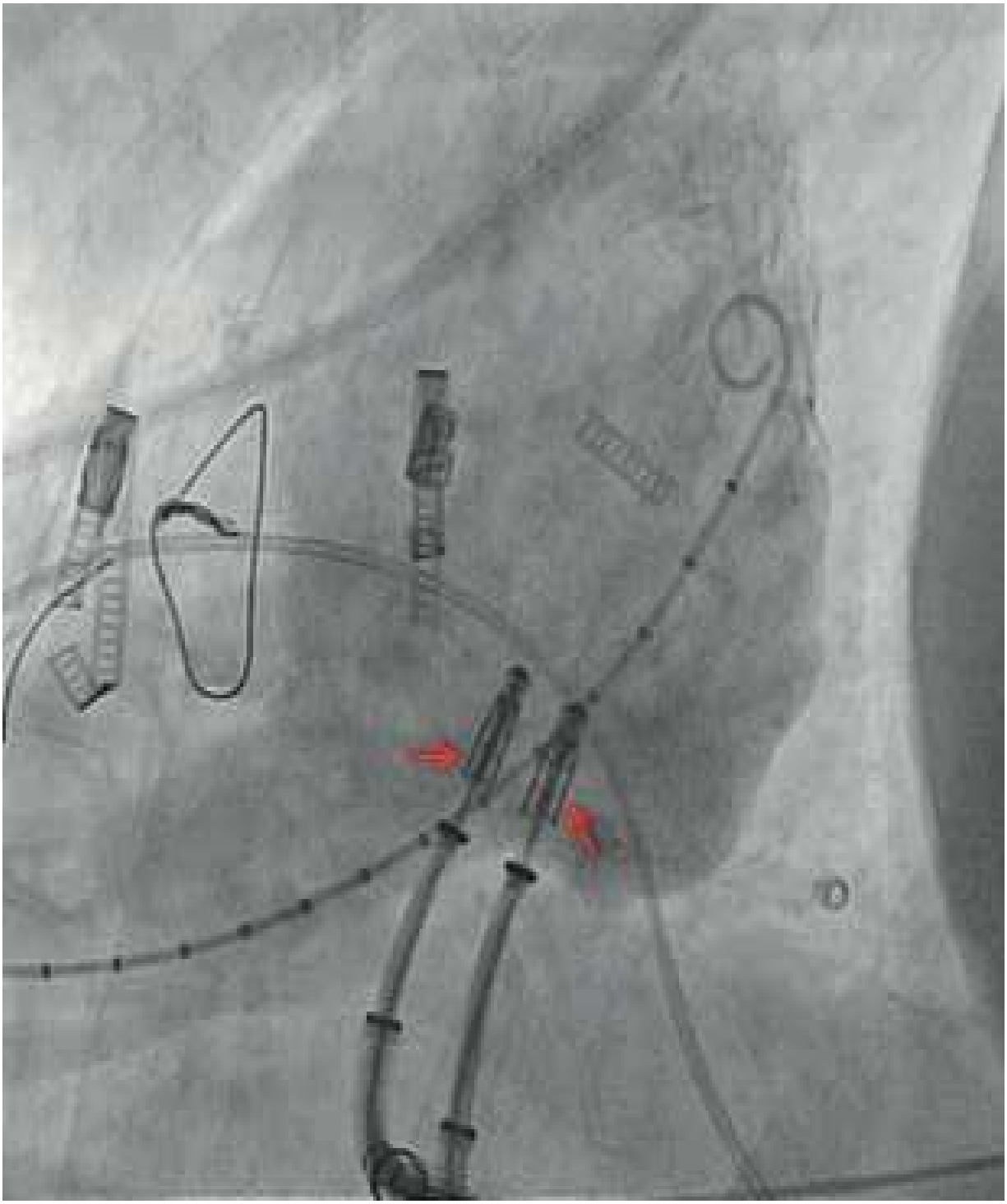

A
B
C
D
E

MitraClip

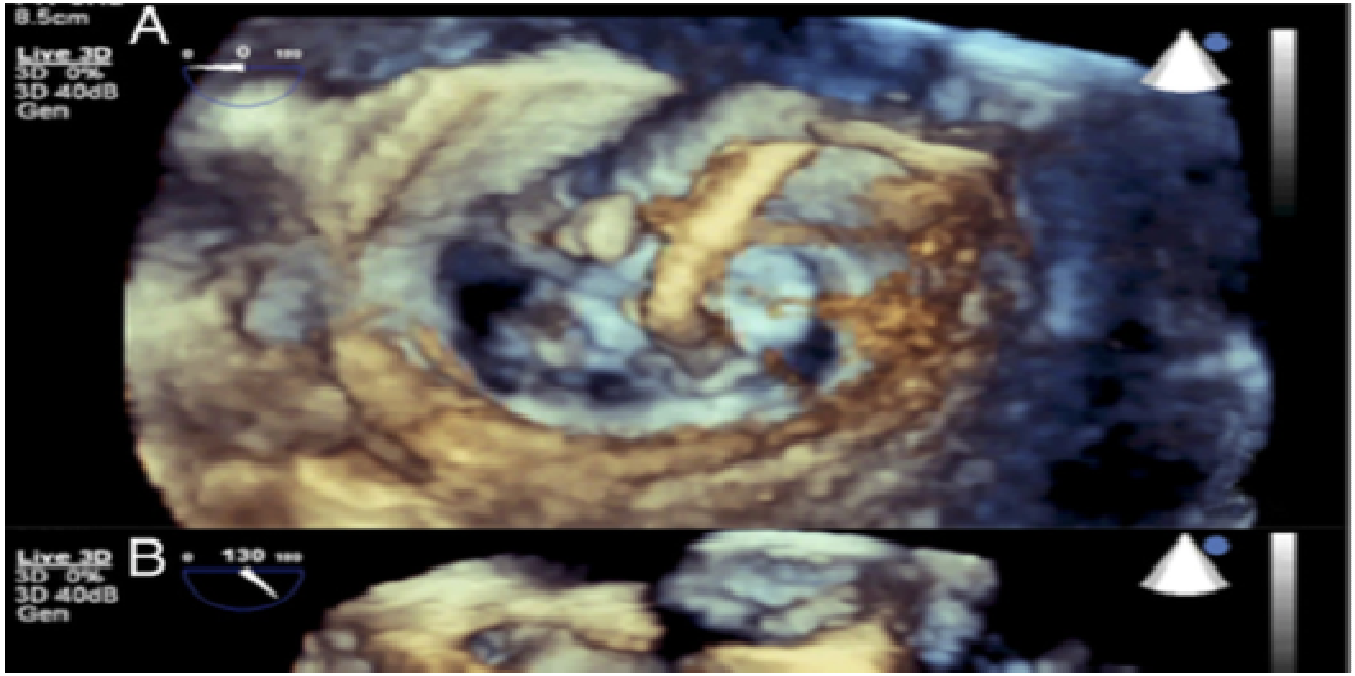








3D Echocardiography to Guide the MitraClip Implant Procedure



The *“respect rather than resect”* controversy

Vantaggi della tecnica conservativa:
1.Conservazione mobilitá dei lembi
2.Ampia superficie di coaptazione dei lembi
3.Conservazione della geometria annulare
4.Possibilitá di impiego di anello per annuloplastica di maggiori dimensioni

Tecniche percutanee e minimamente invasive

1. Intervento sui lembi valvolari
2. Intervento diretto sull'annulus mitralico
3. Intervento indiretto sull'annulus mitralico (attraverso il seno coronarico
4. L'impianto di corde artificiali
5. Rimodellamento del ventricolo sinistro

Interventi riparativi della valvola mitrale

1. Attenta analisi ecocardiografica (3D)
2. Attenta analisi intraoperatoria

Complication rates	Meta-analysis [Vakil *et al.* (18)] (%)	ACCESS-EU [Maisano *et al.* (7)] (%)	TRAMI [Wiebe *et al.* (13) (Euo score ≥20%/EuroSCORE <20%)] (%)	EVEREST II [Whitlow *et al.* (9)] (%)
Procedural death	0.1	0.0	–	0.0
30-day mortality	4.2	3.4	4.3/1.1* (in hospital mortality)	7.7
All-cause mortality during follow-up	15.8 (mean follow-up 310 days)	17.3% (12–month follow-up)	13.4/9.6 (mean follow-up of 72 days)	24.4 (12–month follow-up)
Vascular complications needing intervention	1.0§	–	–	–
Major bleeding requiring transfusion	9.7§	–	13.7/8.7*	17.9¶
Bleeding complications	–	3.9¶	–	–
Tamponade or significant pericardial effusion	0.7§	1.1¶	1.1/1.6*	–
Emergent cardiac surgery	0.7§	0.4¶	–	0.0¶
Non-fatal myocardial infarction	0.4§	0.7¶	0.0/0.2*	2.6¶
Chordal rupture	0.8§	–	–	–
Single leaflet clip detachement	2.3§	4.8 (diagnosed within 6 months)	–	–
Clip embolism	0.04§	0.0¶	–	–
Hemorrhagic or ischemic stroke/TIA	1.3§	0.7¶	0.7/0.0*	2.6¶
Acute renal failure	4.2§	4.8¶	1.8/0.2* (dialysis at discharge)	3.8¶
Need for repeat MitraClip	1.6§	3.4¶	1.8/1.6*	0.0¶

Deuschl et al. J Thorac Dis 2015;7(9):1509-1517