



Pertinenza dell'emodinamista sulla valvola tricuspide

Sicuramente trascurata...

The image displays two screenshots of the PubMed.gov search interface. The top screenshot shows a search for "tricuspid regurgitation" with 11,697 results. The bottom screenshot shows a search for "mitral regurgitation" with 34,492 results. Both screenshots include a search bar, navigation buttons (Save, Email, Send to), sorting options (Sorted by: Best match), and a "Display options" button. The results section for each search includes a "RESULTS BY YEAR" chart, a checkbox to select the top result, the title of the result, the author(s), the journal citation, the PMID, and a "Share" button. The text for the top result in the bottom screenshot is partially truncated.

PubMed.gov tricuspid regurgitation [Advanced](#) [Create alert](#) [Create RSS](#) [User Guide](#)

Save Email Send to Sorted by: Best match Display options

MY NCBI FILTERS 11,697 results

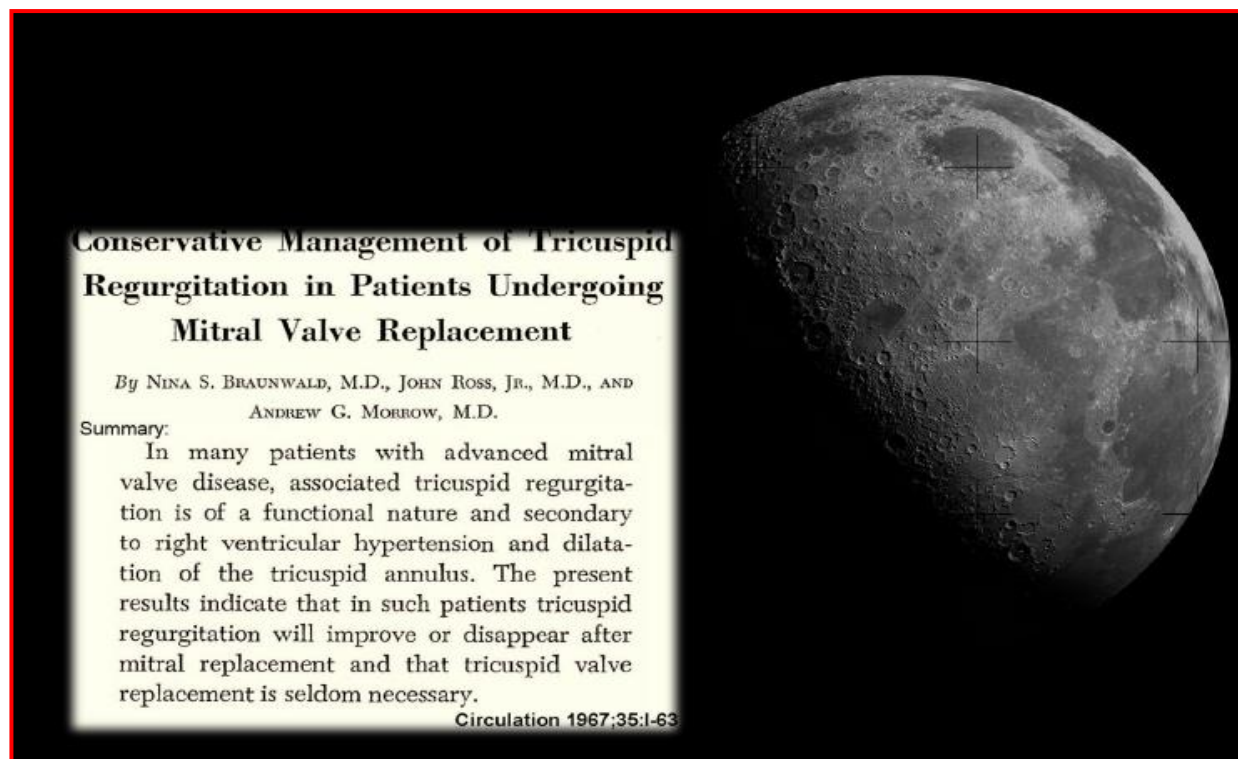
RESULTS BY YEAR **Tricuspid regurgitation diagnosis and treatment.**
1 Arsalan M, Walther T, Smith RL 2nd, Grayburn PA.
Cite Eur Heart J. 2017 Mar 1;38(9):634-638. doi: 10.1093/eurheartj/ehv487.
PMID: 26358570 Review.
Share **Tricuspid regurgitation (TR)** is the most common lesion of the **tricuspid valve (TV)**. ...

PubMed.gov mitral regurgitation [Advanced](#) [Create alert](#) [Create RSS](#) [User Guide](#)

Save Email Send to Sorted by: Best match Display options

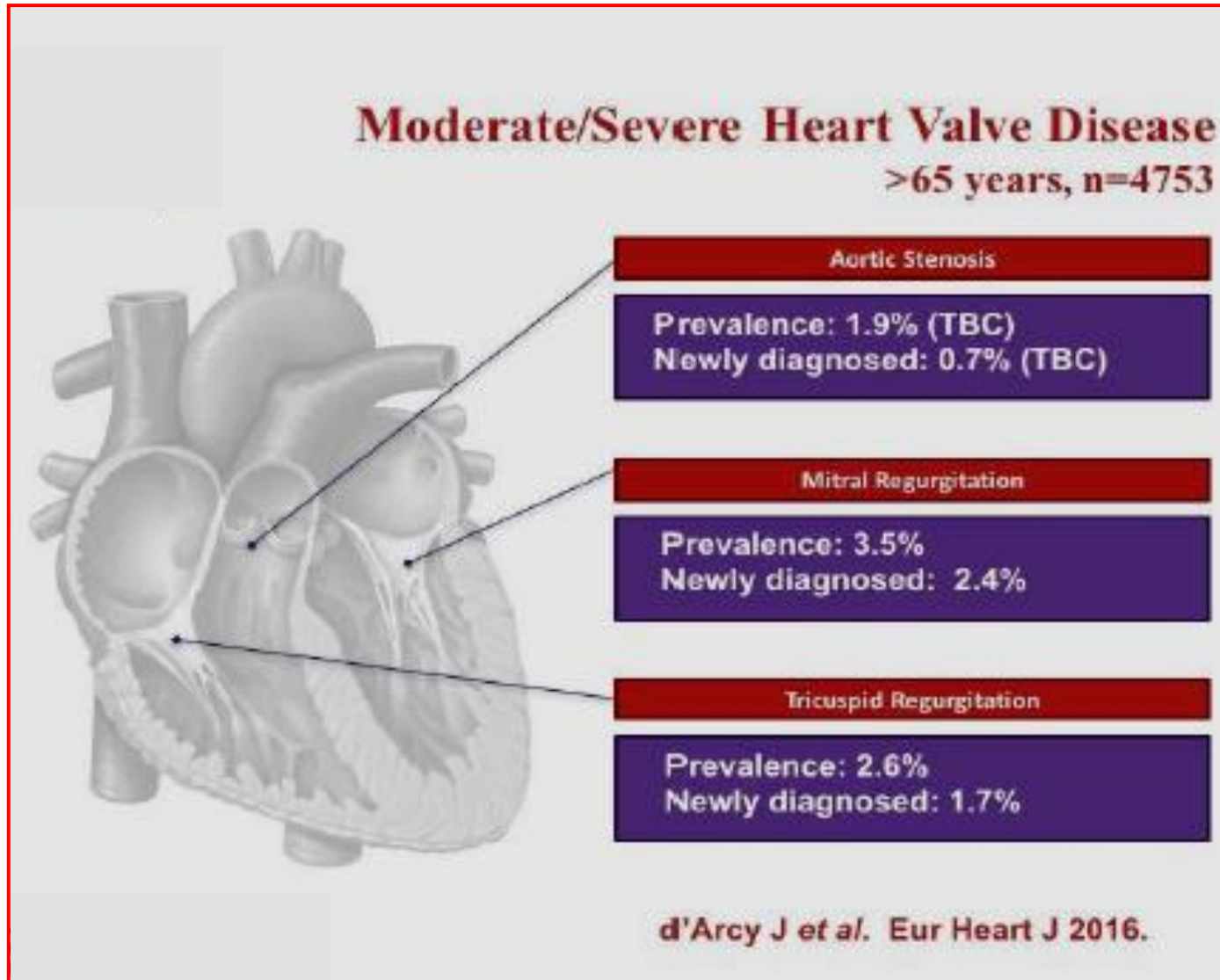
MY NCBI FILTERS 34,492 results

RESULTS BY YEAR **Mitral regurgitation.**
1 Enriquez-Sarano M, Akins CW, Vahanian A.
Cite Lancet. 2009 Apr 18;373(9672):1382-94. doi: 10.1016/S0140-6736(09)60692-9. Epub 2009 Apr 6.
PMID: 19356795 Review.
Share **Mitral regurgitation** affects more than 2 million people in the USA. ...Surgery is the only treatment proven to improve symptoms and prevent heart failure. **Valve** repair improves outcome compared with **valve** replacement and reduces mortality of patient wi ...



Da qui la convinzione che:

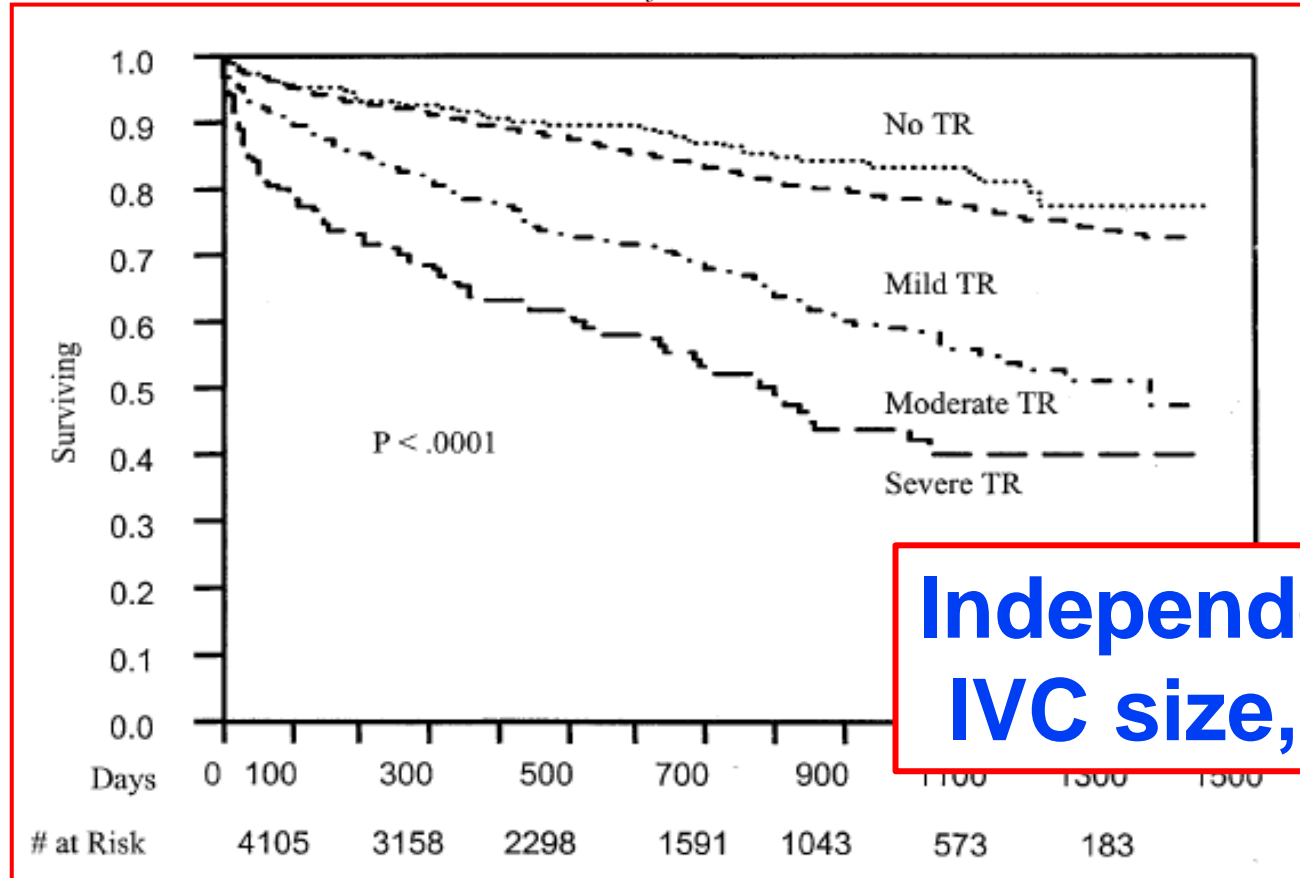
- ✓ IT non ha un impatto clinico significativo
- ✓ Il riscontro di IT severa non è un reperto frequente
- ✓ Correggendo le valvulopatie sottostanti l'IT migliora «sempre»!



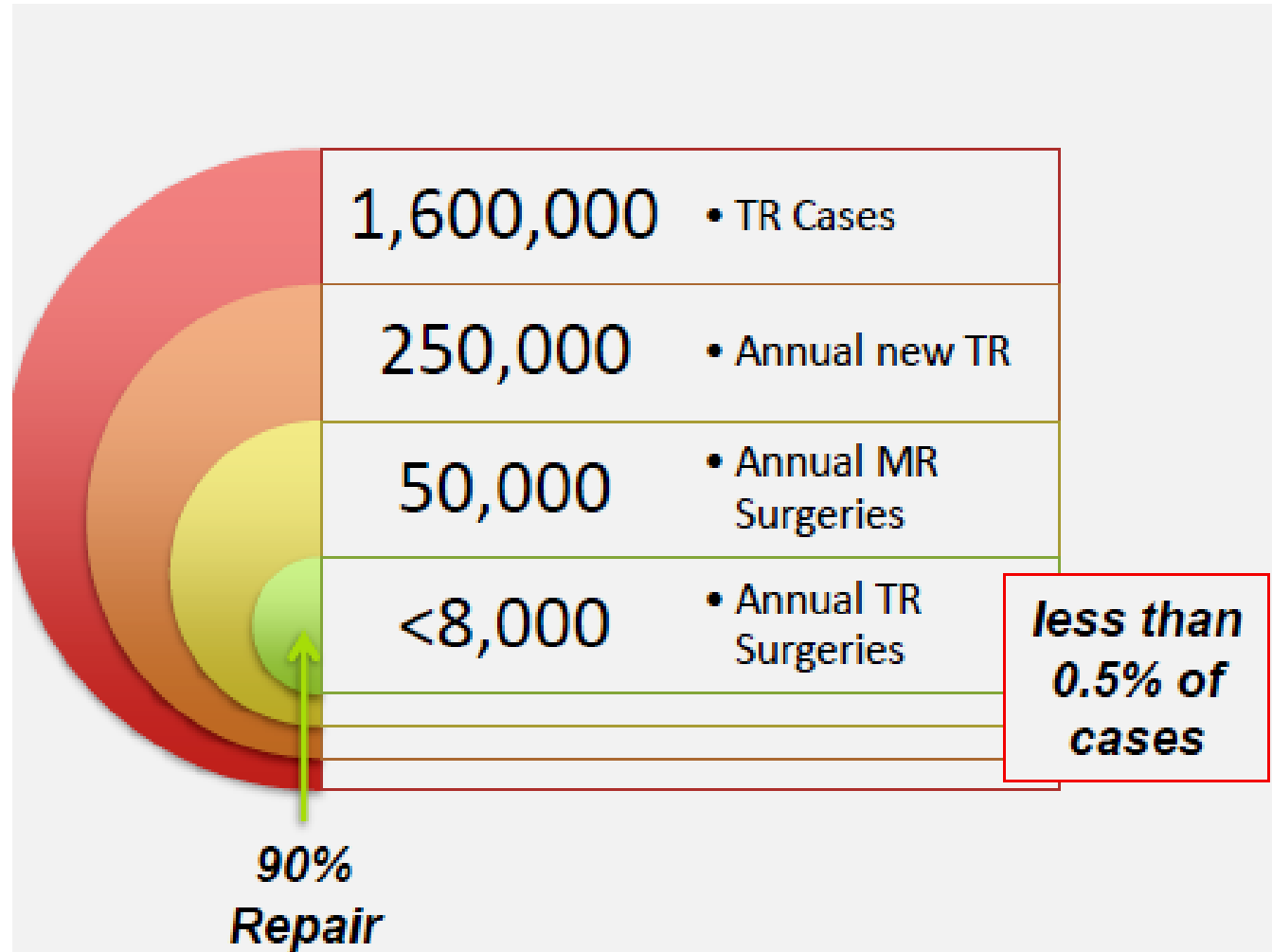
Prognosi

Impact of Tricuspid Regurgitation on Long-Term Survival

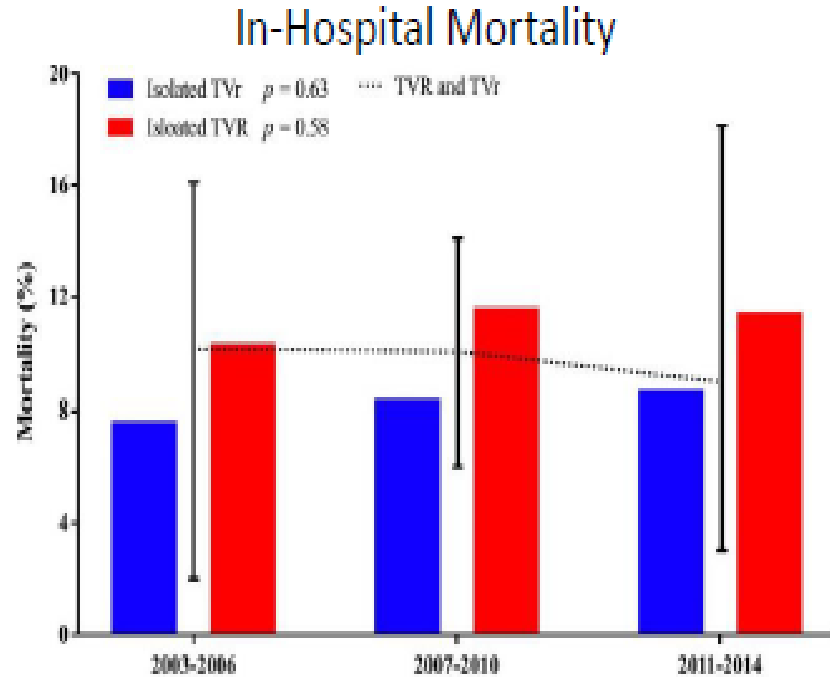
Jayant Nath, MD,* Elyse Foster, MD, FACC,† Paul A. Heidenreich, MD*
Palo Alto and San Francisco, California



Trattamento Chirurgico della IT



Surgical Outcome



449 consecutive patients who underwent TV surgery (397 repairs and 52 replacements) due to severe TR between 1997 and 2010.

Cox-regression analysis revealed independent determinants of mortality:

- Age (HR=1.03; 95% CI 1.01 to 1.05)
- Male gender (HR=1.96; 95% CI 1.29 to 2.99)
- NYHA functional class IV (HR=2.08; 95% CI 1.31 to 3.30)
- Liver cirrhosis (HR=2.51; 95% CI 1.11 to 5.68)
- Preoperative levels of hemoglobin (HR=0.89; 95% CI 0.80 to 0.99)
- Albumin (HR=0.52; 95% CI 0.33 to 0.81)
- GFR (HR=0.86; 95% CI 0.78 to 0.95)

WE OPERATE TOO LATE!!

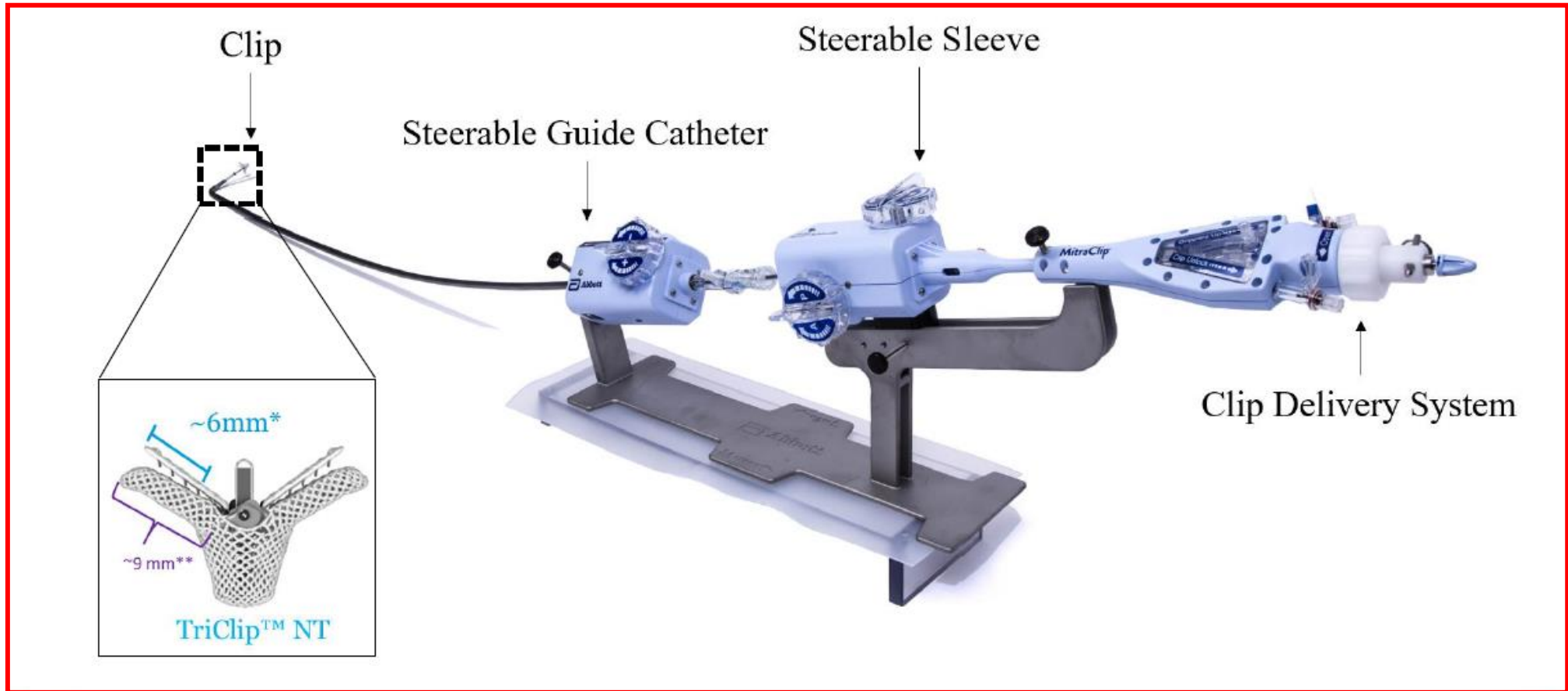
Kim JB, Jung S-H, Choo SJ, et al. Heart 2013;99:181–187.

Approccio transcateretere della IT

<p>Direct Suture Annuloplasty</p>							
<p>Direct Ring Annuloplasty</p>							
<p>Coaptation Enhancement</p>							
<p>Valve Replacement</p>							

TriClip System

CE mark April 9, 2020



Stent graft from the inferior to the superior vena cava

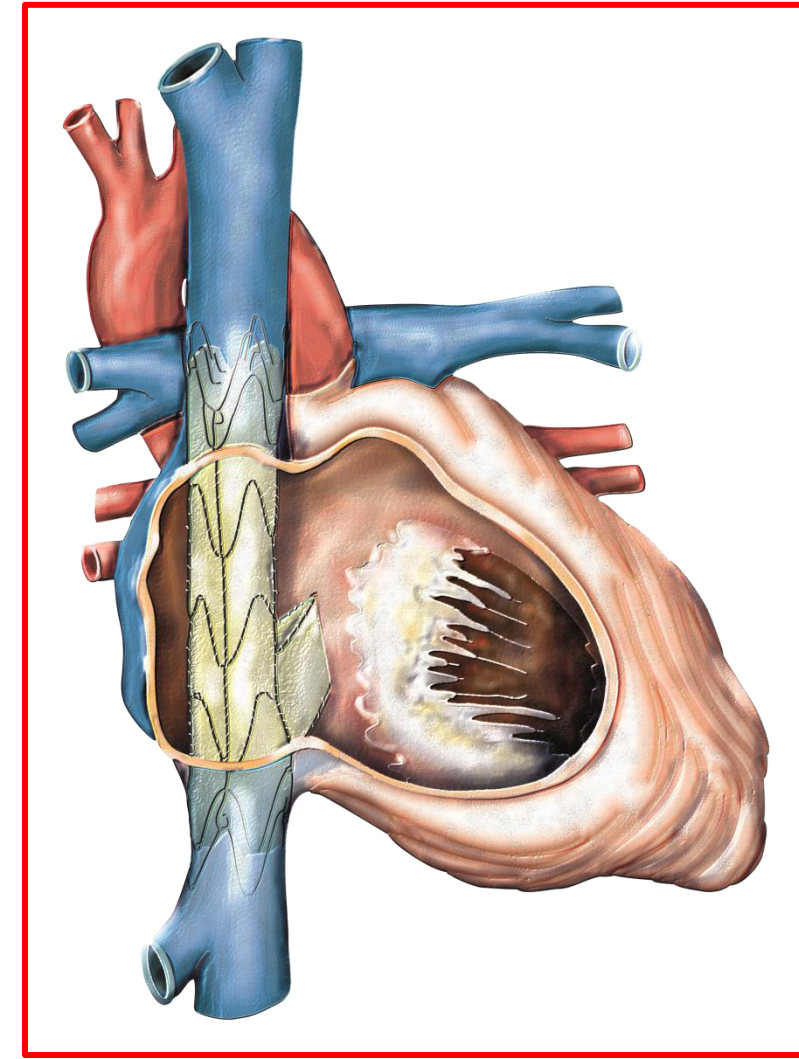
- Safe anchoring
- Graft size adapted to IVC and SVC diameters
- Graft length adapted to the RA length

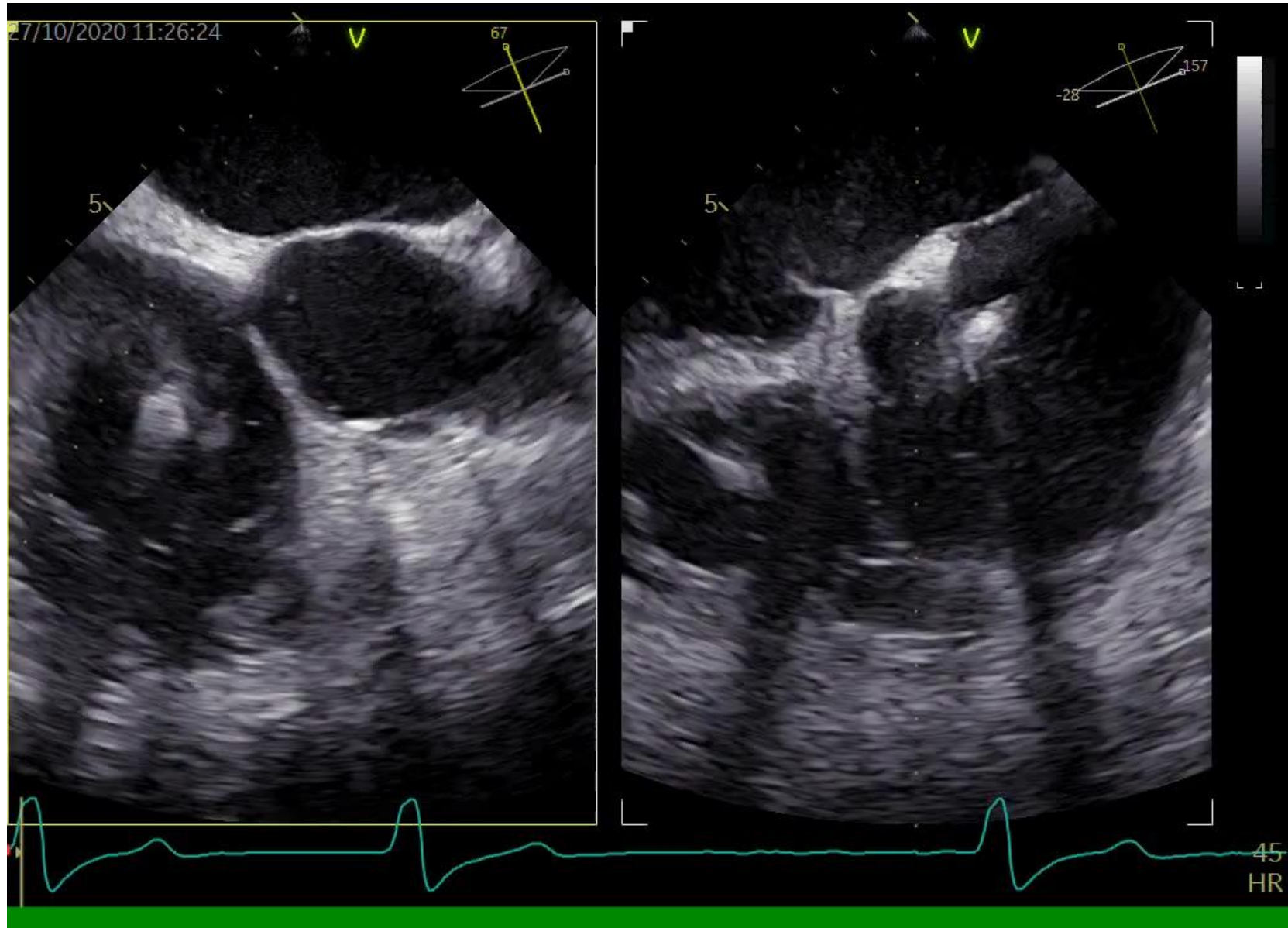
Lateral bicuspid valve element

- Prevents backflow into the venous system

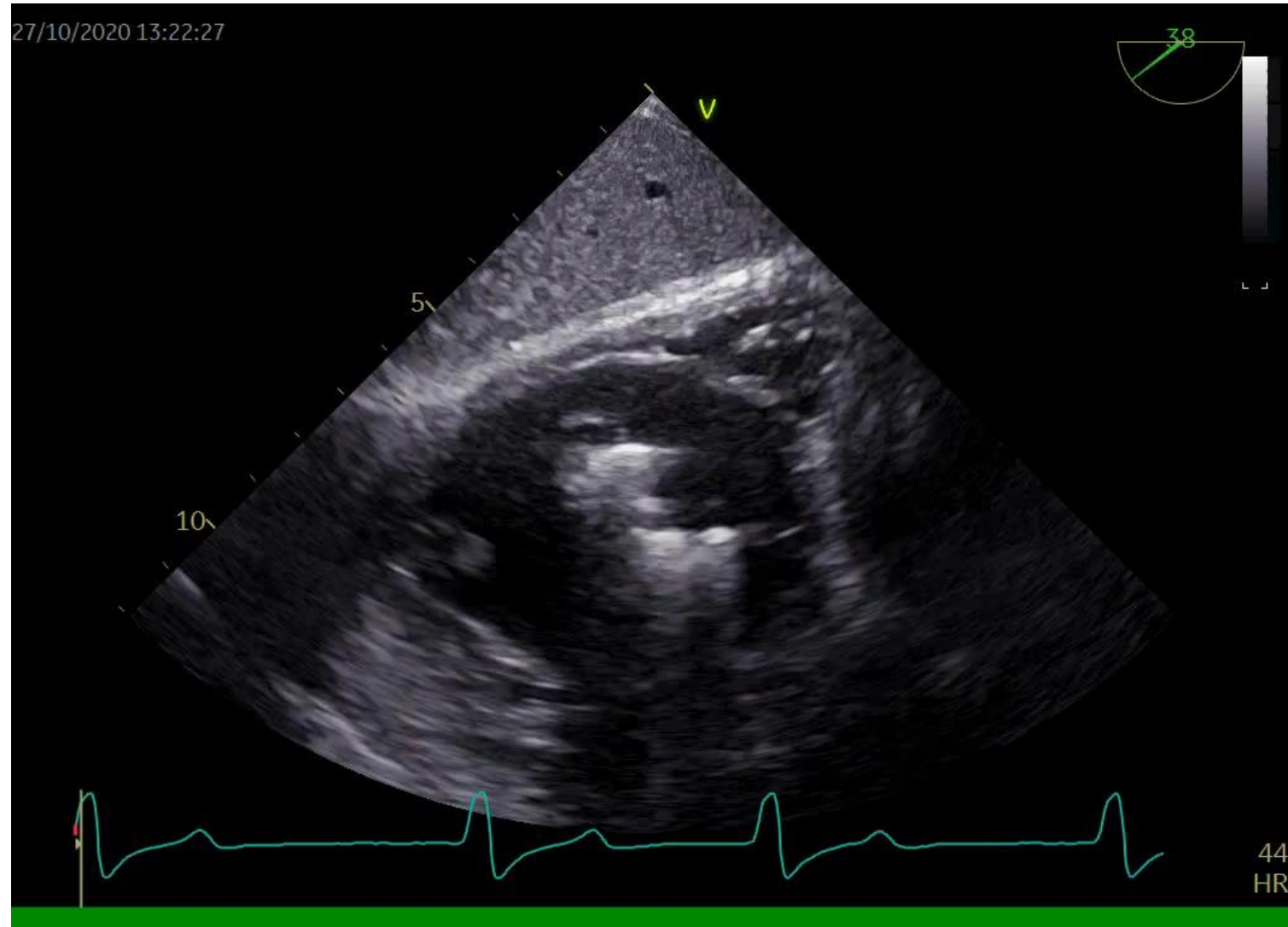
Thin porcine pericardium for cover and leaflets

- Responds to small pressure gradients

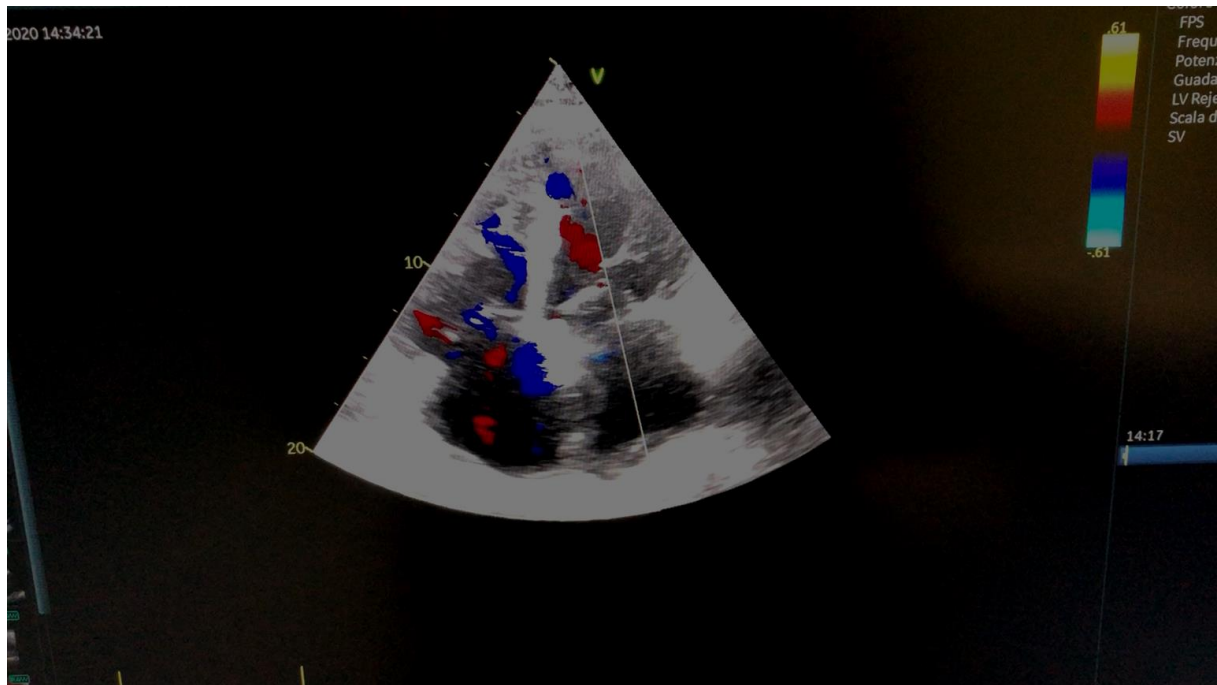




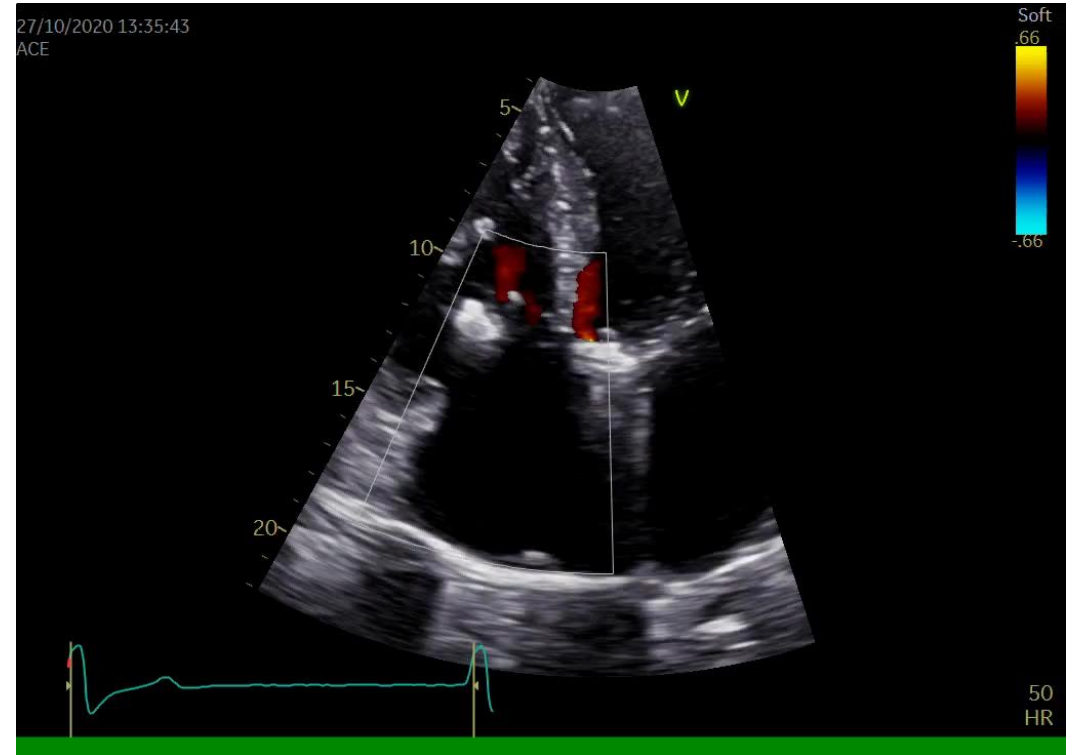
4 clip, un distacco parziale



Risultato finale

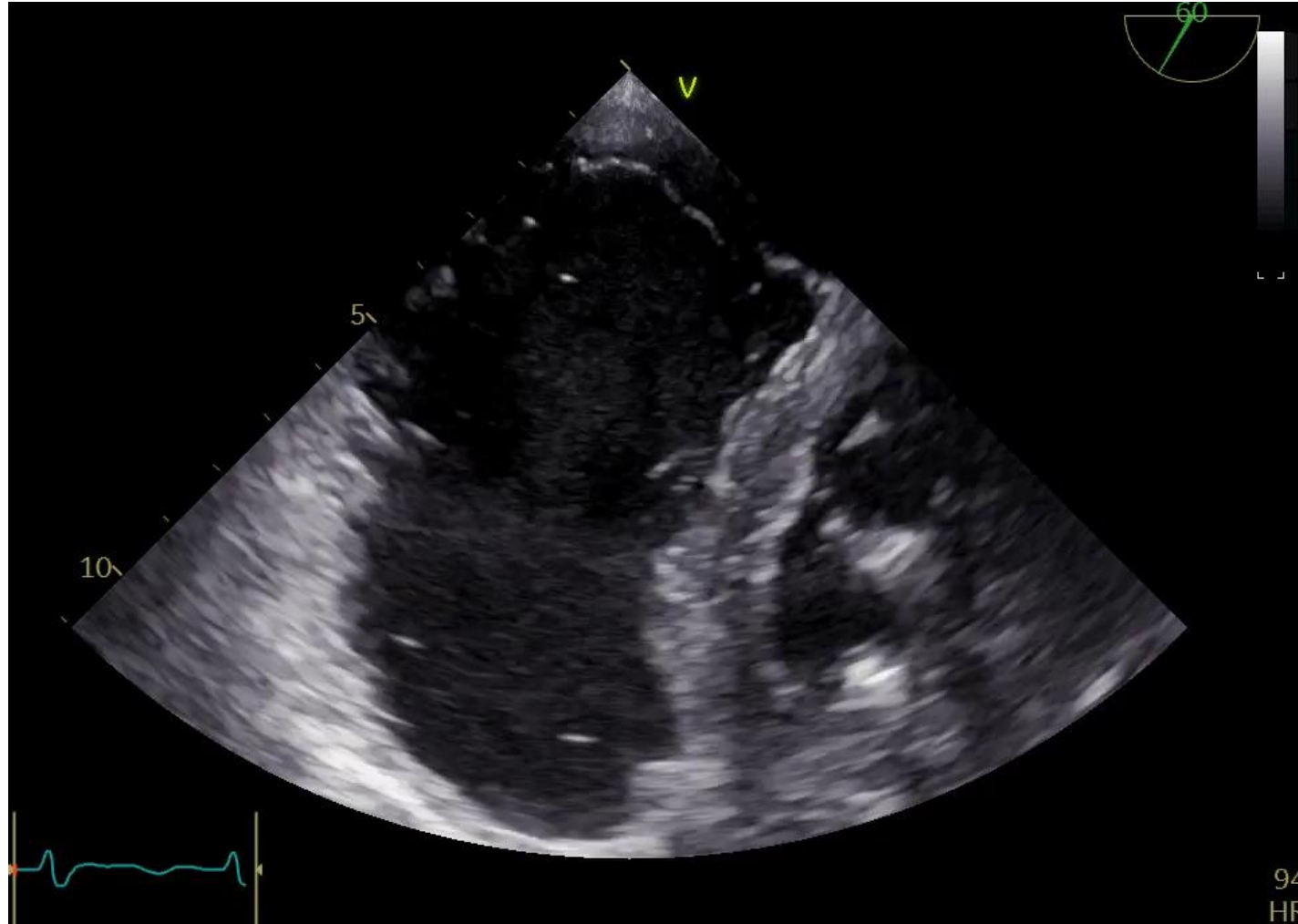


TTE Pre

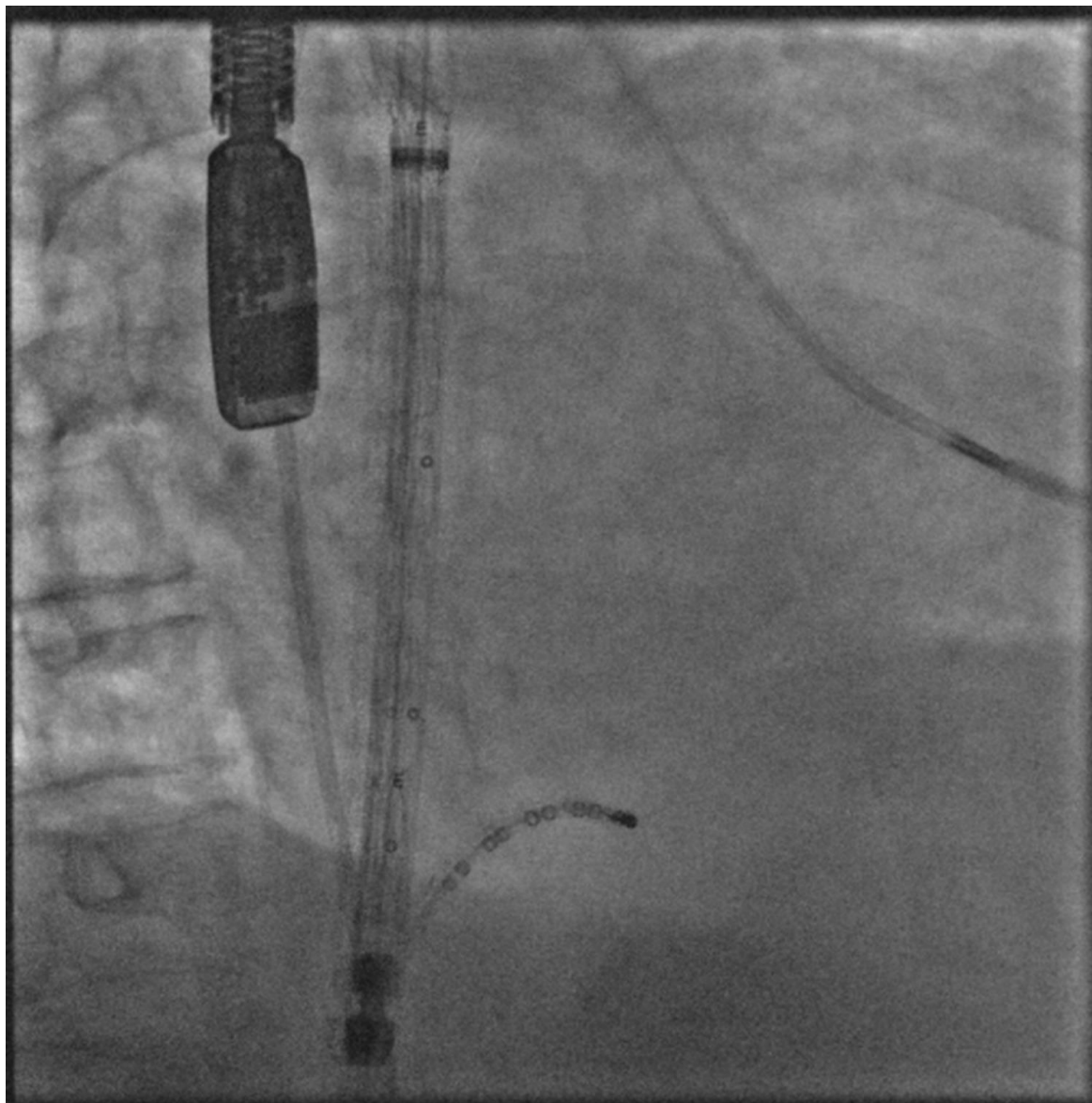


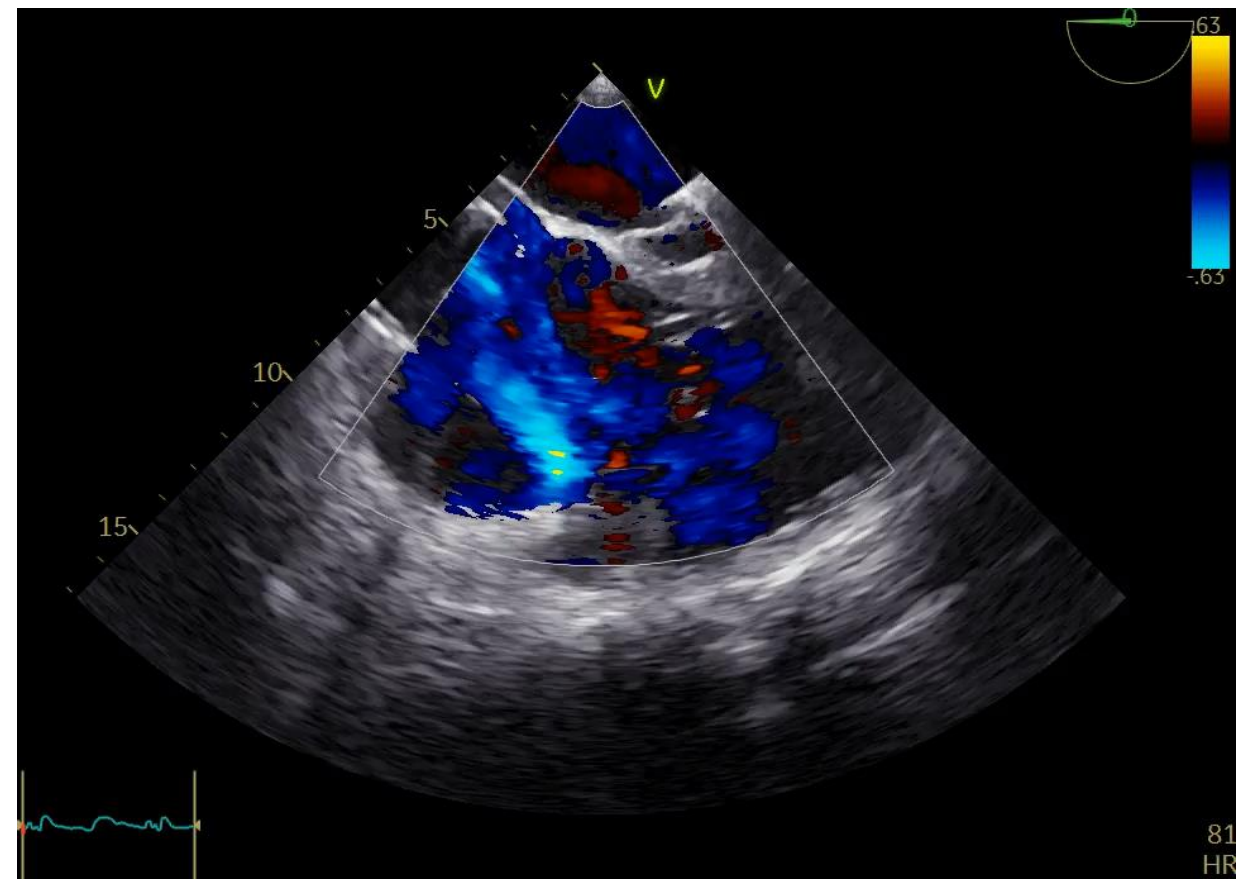
TTE Post

Come l'imaging ci guida nella scelta del device

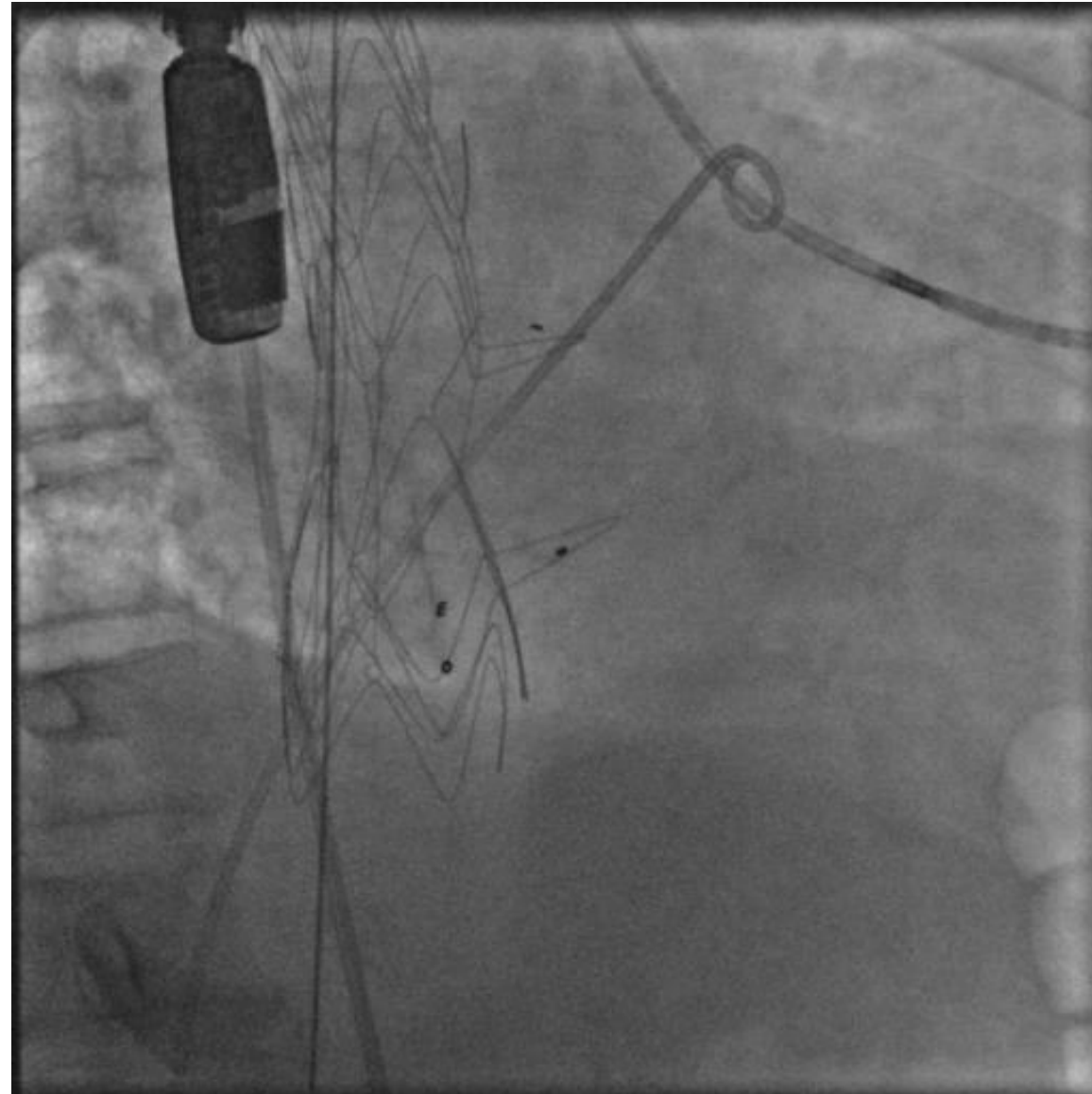


Impianto Tricento





Angio post-impianto



Nostra esperienza (luglio 2019-novembre 2019, casi compassionevoli)

Pz	Comorbidità	IT Pre	Cath Dx	VDx	IT Post	NYHA Pre-Post
R.P. a. 49 Femmina 19/06/18	LES, epatosplenomegalia con trombosi portale e mesenterica, gastrite erosiva, FA perm, CMD ipocinetica FE 40%	4+/5+ Funzionale	PAPs 45 mmHg PAPm 20 mmHg	Dilatato TAPSE 26 AD dilatato	2+/5+	III I
C.A. a. 73 Femmina 09/04/19	FA perm, Ipert. Art., IRC III, 1996 protesi meccanica aortica e mitralica	5+/5+ Funzionale	PAPs 78 mmHg PAPm 42 mmHg	Liev dilatato TAPSE 27 Mega AD	2+/5+	IV II
S.C. a. 78 Femmina 29/10/19	FA perm, Ipert. Art., Diabete mellito, BPCO, IRC III, Anemia sec. IRC, Trombocitopenia, emorragia gastro – chiusura auricola sin, PMK	5+/5+ Mista con lead PMK e gap	PAPs 53 mmHg PAPm 20 mmHg	Dilatato TAPSE 22 AD dilatato	3+/5+	III II
L.C. a. 58 Femmina 31/10/19	Fumatrice, Ipert. Art., Dislipidemia, STEMI laterale, PCI IVA e Cx, stent femorale sup, severa BPCO, recente PCI 3 stent su Dx, FE 35%	5+/5+ Displasica Prolasso LA	PAPs 65 mmHg PAPm 35 mmHg	Dilatato TAPSE 28 AD dilatato	1+/5+	III II

Nostra esperienza (giugno 2020-oggi, TriClip System)

Pz	Comorbidità	IT Pre	Cath Dx	VDx	IT Post	NYHA Pre-Post
M.G. a. 77 14/07/20	FA perm, CMD ipocinetica FE 40%	5+/5+ Funzionale	PAPs 45 mmHg PAPm 20 mmHg	Dilatato TAPSE 26 AD dilatato	2+/5+	III I
V.A. a. 83 15/07/20	FA perm, Ipert. Art., IRC III	5+/5+ Funzionale	PAPs 68 mmHg PAPm 42 mmHg	Dilatato TAPSE 27 Mega AD	2+/5+	IV II
R.M. a. 75 24/09/20	FA perm, Diabete mellito, BPCO, IRC III,	4+/5+ Mista	PAPs 63 mmHg PAPm 32 mmHg	Dilatato TAPSE 22 AD dilatato	3+/5+	III I
F.L. a. 68 19/10/20	Ipert. Art., Dislipidemia, severa BPCO, FE 45%	5+/5+ Funzionale	PAPs 55 mmHg PAPm 30 mmHg	Dilatato TAPSE 28 Mega AD	1+/5+	III II
M.C a. 78 27/10/20	FA perm, Ipert. Art., IRC III, 2005 protesi meccanica aortica	5+/5+ Mista	PAPs 43 mmHg PAPm 28 mmHg	Dilatato TAPSE 28 AD Dilatato	1+/5+	III I
P.G. a. 75 24/11/20	FA permanente, protesi meccanica mitralica	5+/5+ Funzionale	PAPs 48 mmHg PAPm 26 mmHg	Dilatato TAPSE 21 Mega AD	2+/5+	IV
R.A. a. 74 19/7/21	Severa BPCO, FE 40%	5+/5+ Funzionale	PAPs 51 mmHg PAPm 27 mmHg	Dilatato TAPSE 18 Mega AD	3+/5+	III II
M.L. a. 76 28/09/21	IM severa, s/p a Mitraclip, FE 55%	5+/5+ Funzionale	PAPs 48 mmHg PAPm 25 mmHg	Dilatato TAPSE 18	1+/5+	

Nostra esperienza Tricento

Pz	Comorbidità	IT Pre	Cath Dx	VDx	IT Post	NYHA Pre-Post
A.T. a. 69 Femmina 19/03/20	Pregresso intervento di valvuloplastica mitralica, FA perm, FE 50%	5+/5+ Funzionale	PAPs 45 mmHg PAPm 20 mmHg	Dilatato TAPSE 26 AD dilatato	-	III-IV Deceduta
T.M. a. 70 Femmina 07/05/20	FA perm, IRC III, 1996 protesi meccanica mitralica	5+/5+ Funzionale	PAPs 78 mmHg PAPm 42 mmHg	Liev dilatato TAPSE 27 Mega AD	-	IV II
G.DL. a. 71 Maschio 29/09/20	FA perm, Ipert. Art., Diabete mellito, BPCO, IRC III, Anemia sec. IRC, Trombocitopenia, emorragia gastro – chiusura auricolare sin, PMK	5+/5+ Mista con lead PMK e gap	PAPs 53 mmHg PAPm 20 mmHg	Dilatato TAPSE 22 AD dilatato	-	III II
G.M. a. 58 Maschio 07/02/21	FE 35%, severo scompenso Dx	5+/5+ Displasica Prolasso LA	PAPs 65 mmHg PAPm 35 mmHg	Dilatato TAPSE 28 AD dilatato		III-IV II
C.F. a 67 Maschio 14/09/21	FE 55% trapiantato nel 2005	5+/5+ Largo gap	PAPs 55 mmHg PAPm 28 mmHg	Dilatato TAPSE 18 AD dilatato		
B.C. a 81 Femmina 14/09/21	FE 50% bioprotesi mitralica	5+/5+ Largo gap	PAPs 50 mmHg PAPm 25 mmHg	Dilatato TAPSE 18 AD dilatato		

- ✓ I pazienti con IT funzionale rappresentano un popolazione con fabbisogno clinico insoddisfatto (poche opzioni di trattamento).
- L'utilizzo del TriClip System e del Tricento sembra essere sicuro e fattibile.
- Ecocardiografia (TTE e TEE) è cruciale non solo durante la procedura di impianto ma anche per la corretta scelta del dispositivo.
- L'approccio transcateretere verosimilmente diventerà la prima scelta per i pazienti con IT ad alto rischio chirurgico.