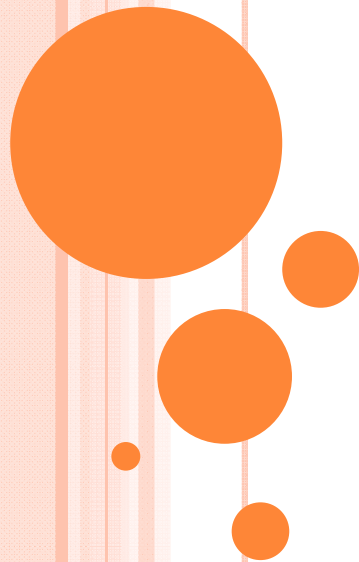

ENFERMEDAD VALVULAR TRICUSPIDEA.

INDICE

- Introducción.
- Anatomía.
- Etiología.
- Fisiopatología y presentación clínica.
- Técnicas de reparación.
- Sustición Valvular. ¿Metálica o Biológica?
- ¿Anuloplatia con anillo o De Vega?

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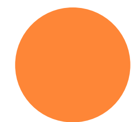

INTRODUCCION

Secondary Tricuspid Regurgitation or Dilatation: Which Should Be the Criteria for Surgical Repair?

Gilles D. Dreyfus, MD, Pierre J. Corbi, MD, K. M. John Chan, AFRCS, and Toufan Bahrami, MD

(Ann Thorac Surg 2005;79:127–32)

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Results. Although not significant there was a difference with regard to hospital mortality (group 1 = 1.8%, group 2 = 0.7%) and actuarial survival rate (Kaplan–Meier: group 1 = 97.3%, 96.2%, and 85.5%; group 2 = 98.5%, 98.5%, and 90.3% at 3, 5, and 10 years, respectively). The New York Heart Association (NYHA) functional class was significantly improved in group 2 (group 1 = 1.59 ± 0.84; group 2 = 1.11 ± 0.31; *p*1). TR increased by more than two grades in 48% of the patients in group 1 and in only 2% of the patients in group 2 ($p < 0.001$).

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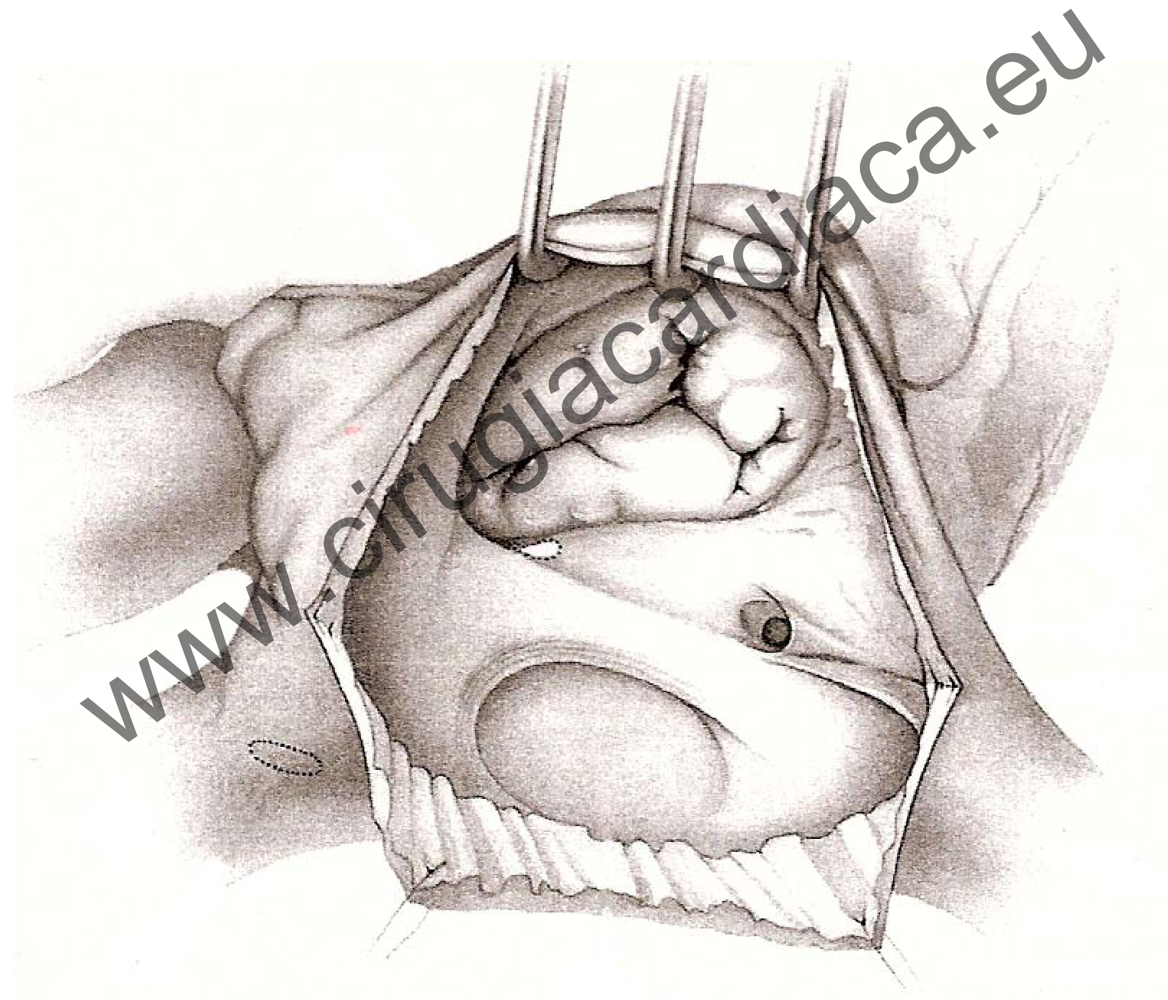

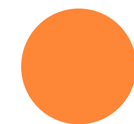

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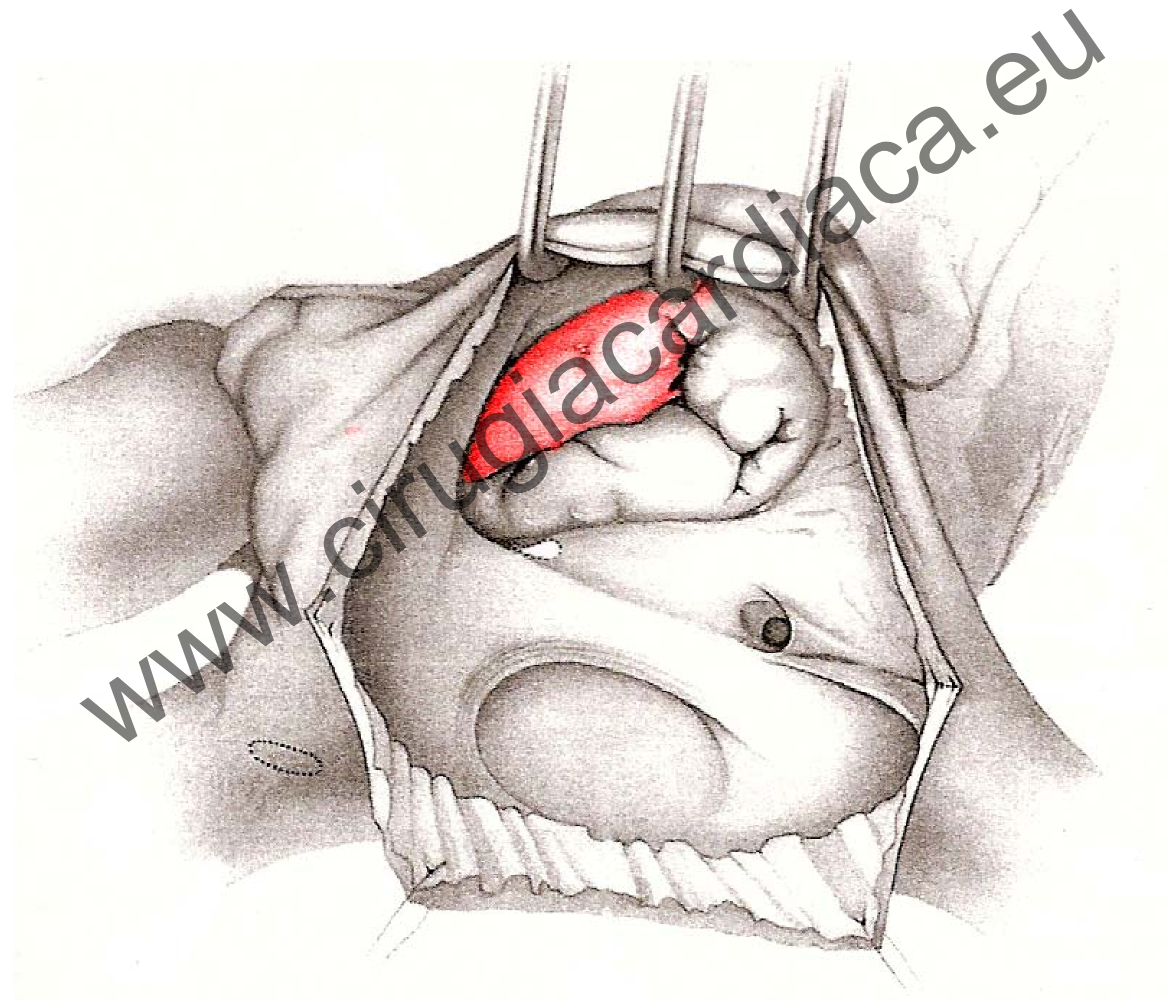

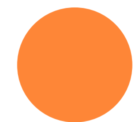

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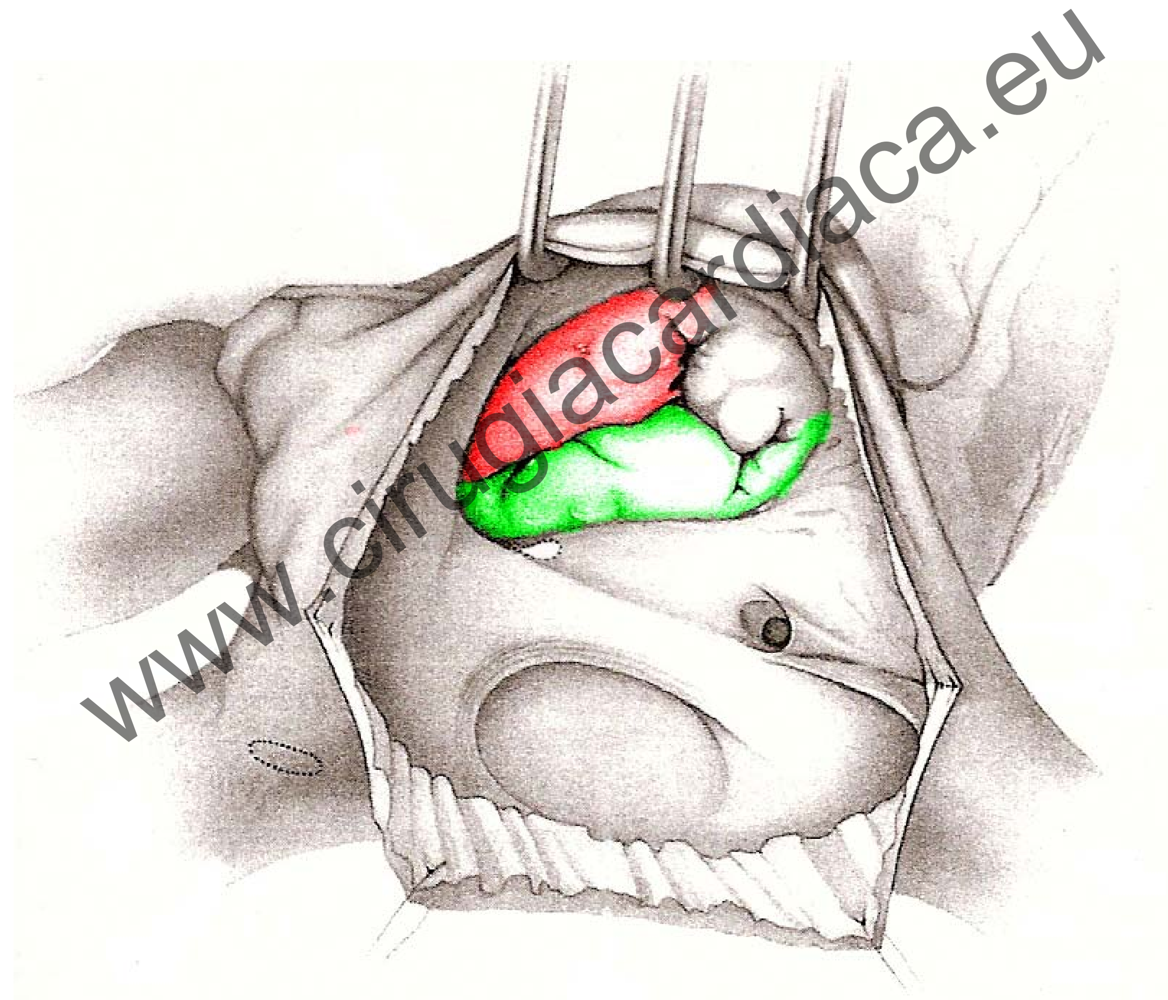

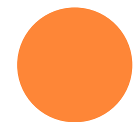

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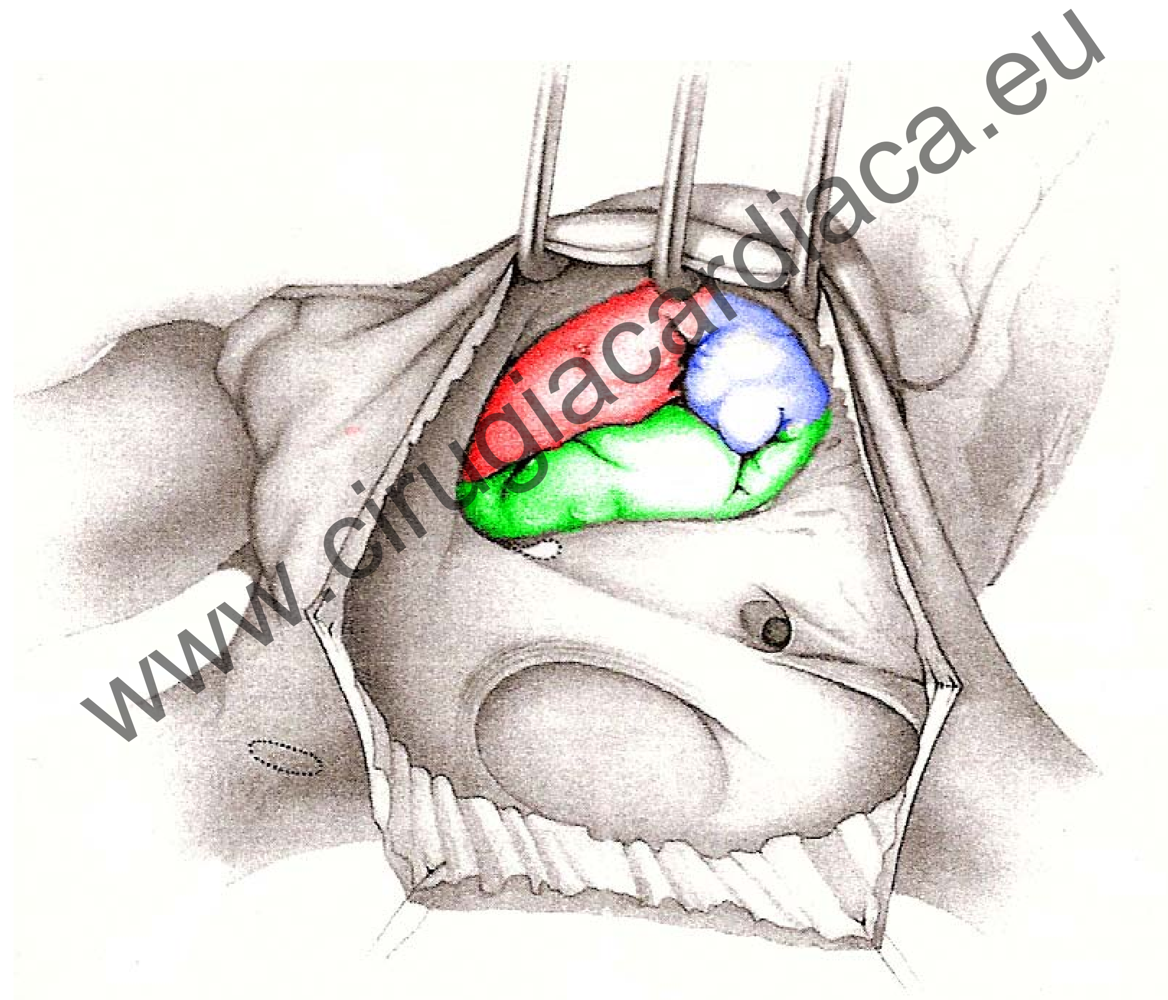

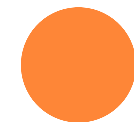

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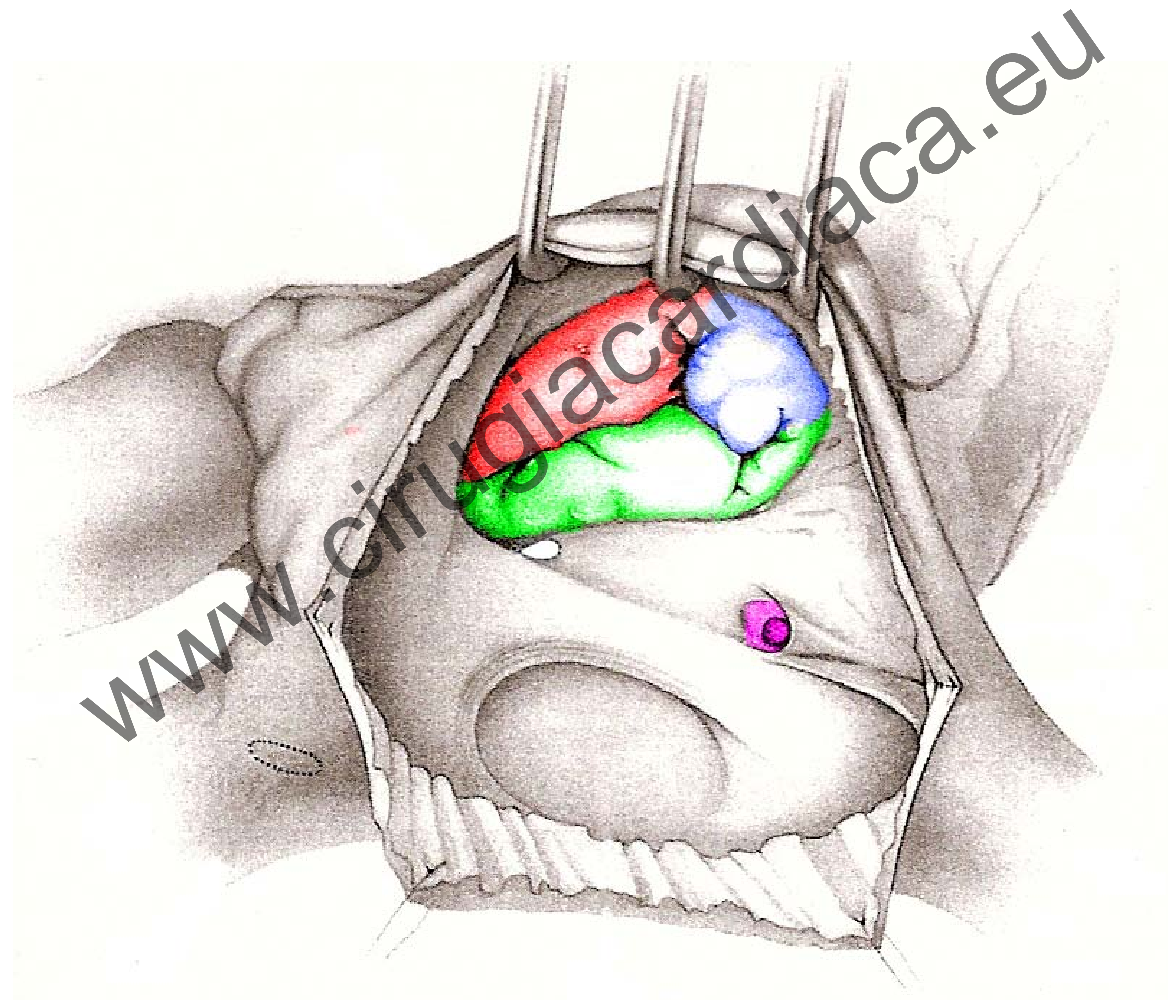

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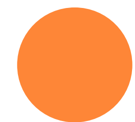

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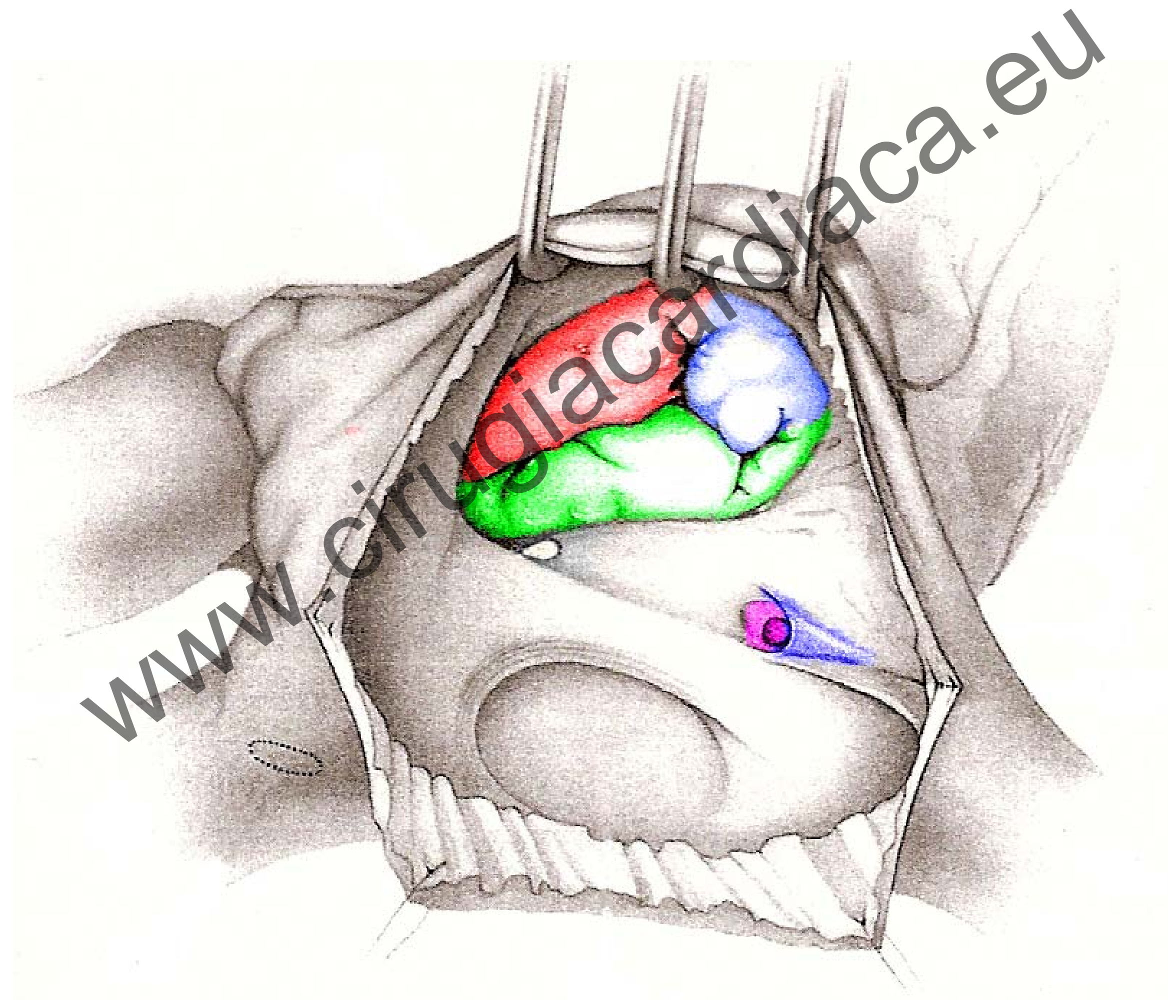

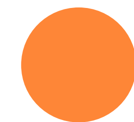

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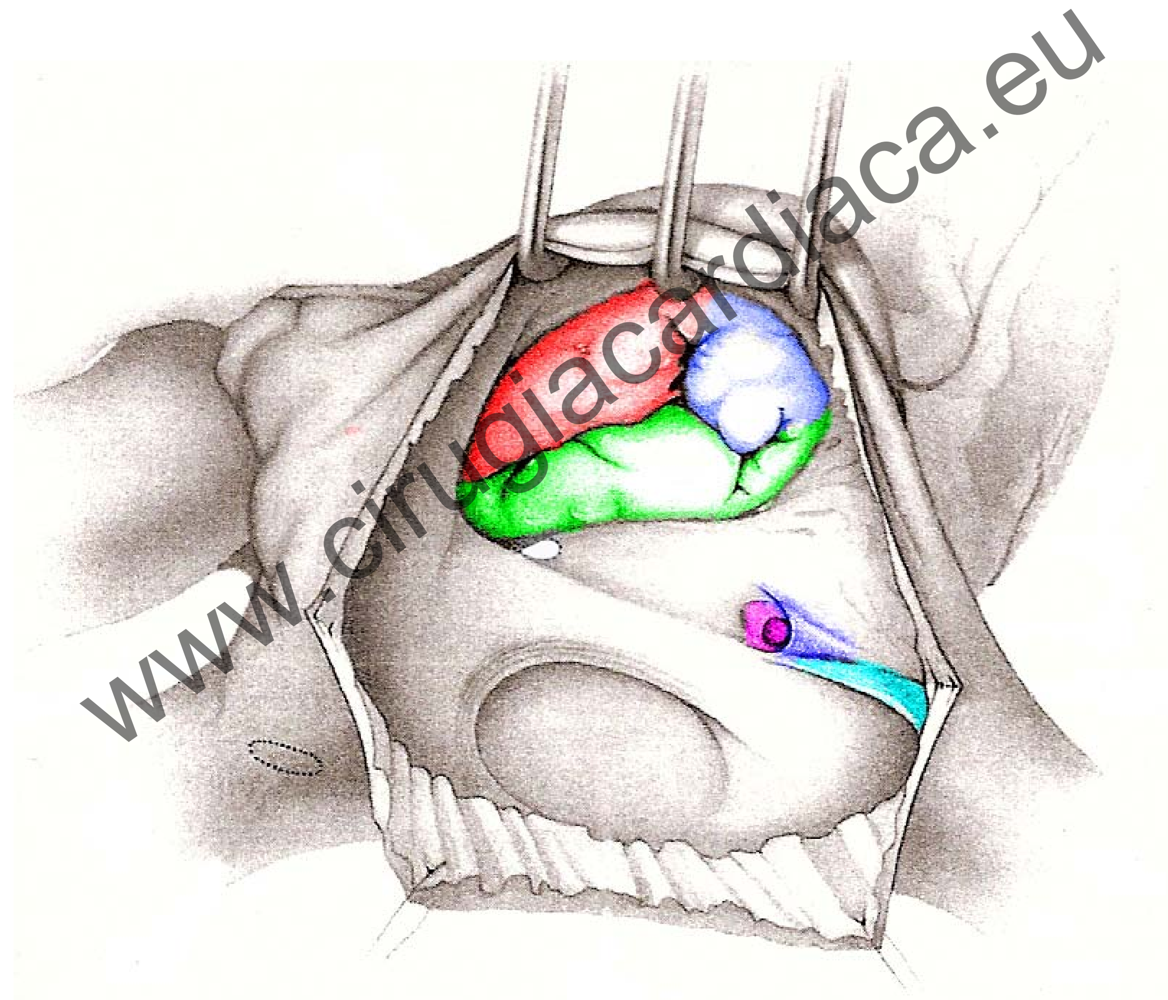

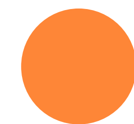

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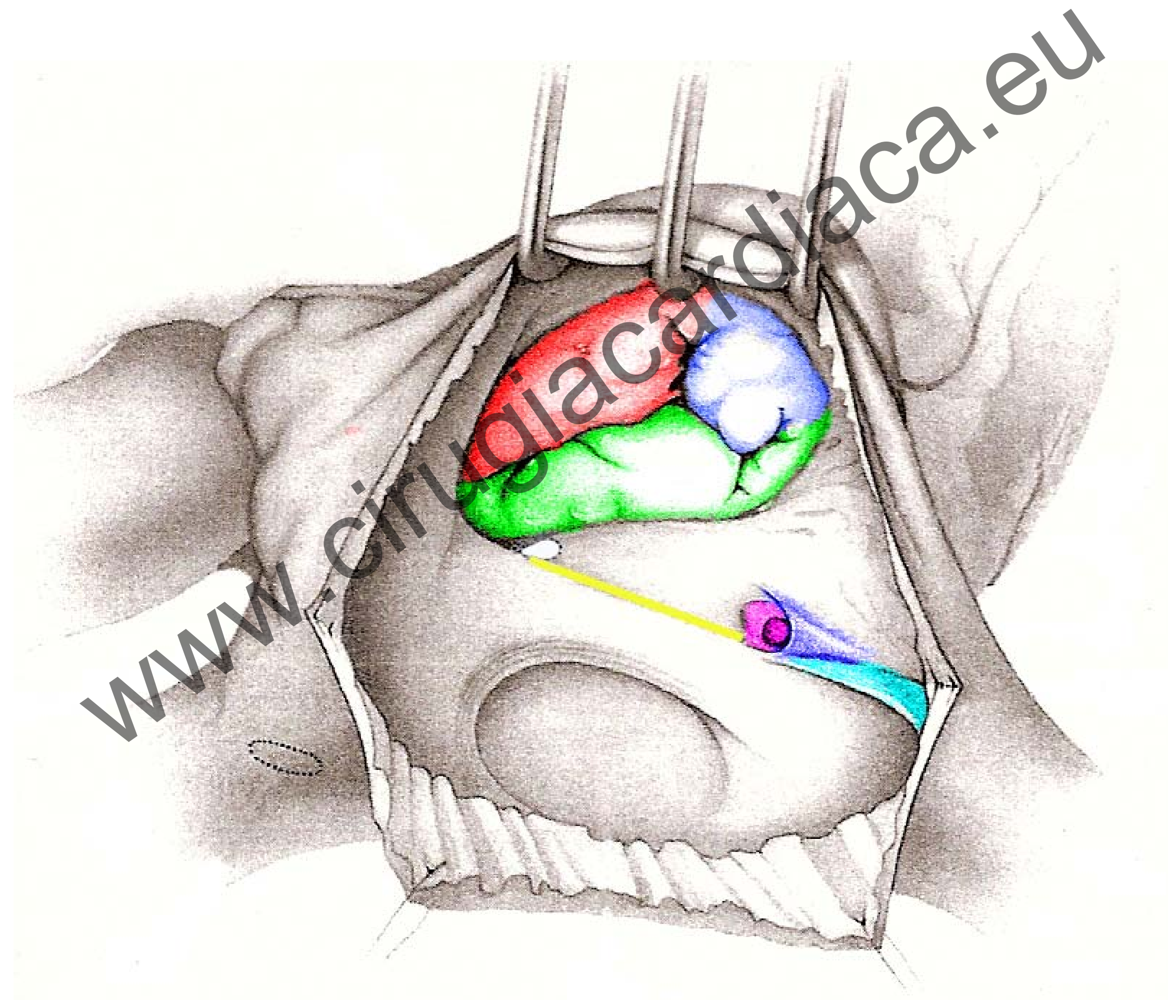

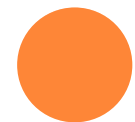

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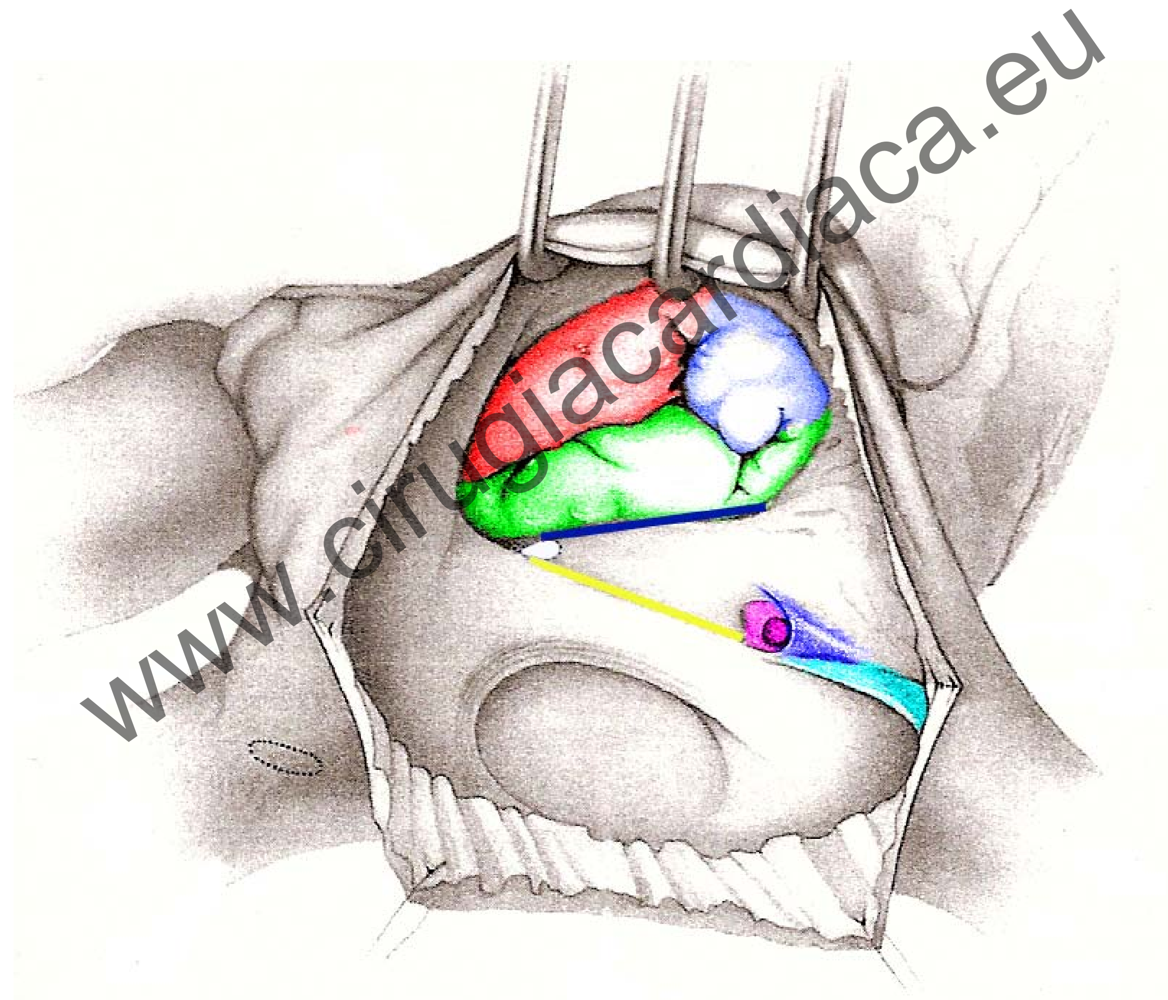

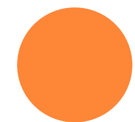

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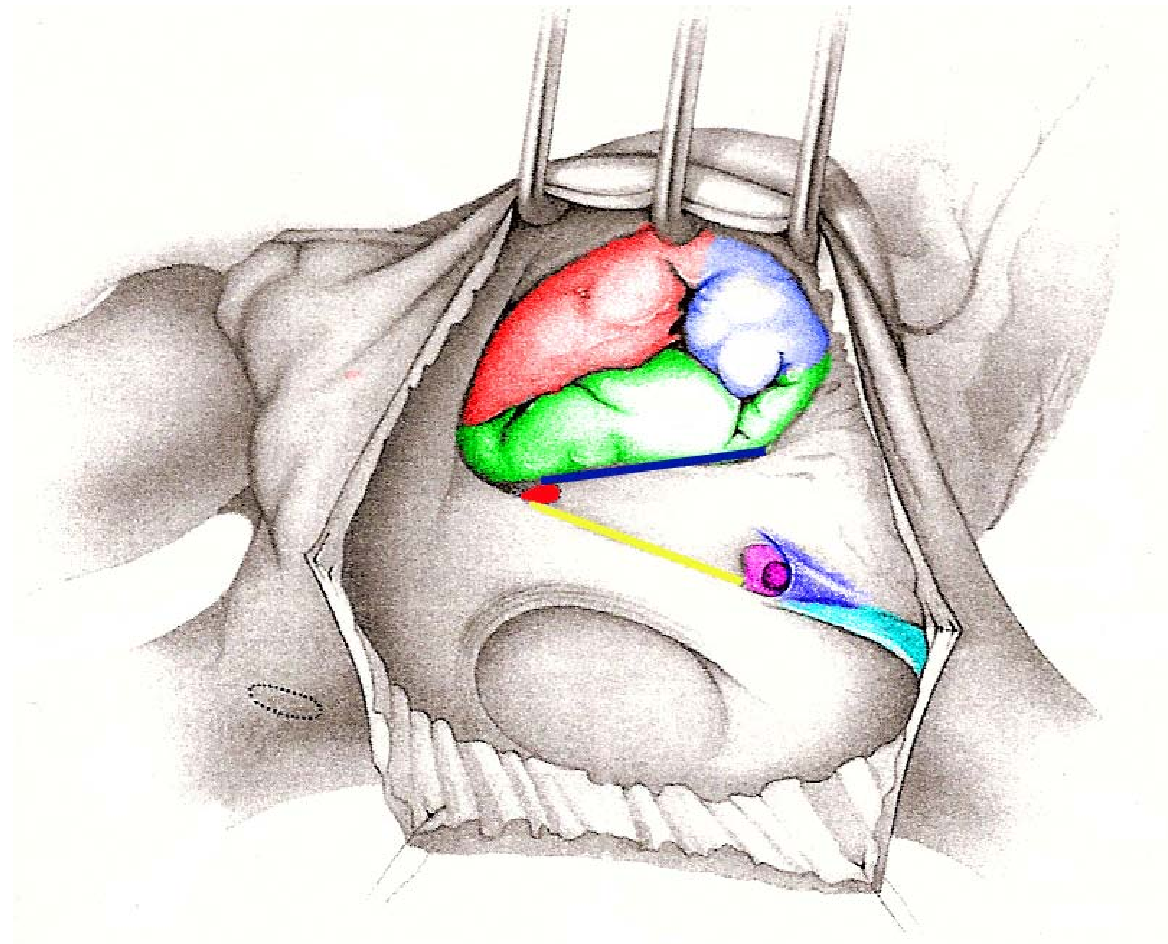
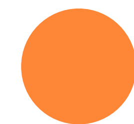
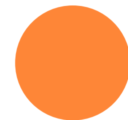




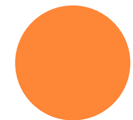
ETIOLOGÍA

- La disfunción primaria de la tricúspide es rara, la más habitual es la etiología reumática.
- Otras causas: EI en ADVP, LES, antidepresivos, IAM VD, dilatadas, sd carcinoide.
- La etiología más frecuente de enfermedad tricuspídea es la secundaria.
  - Enfermedad valvular izquierda.
  - HTP postcapilar→Sobrecarga del VD →disf(x) del VD →dilatación del anulo tricuspideo →IT funcional.

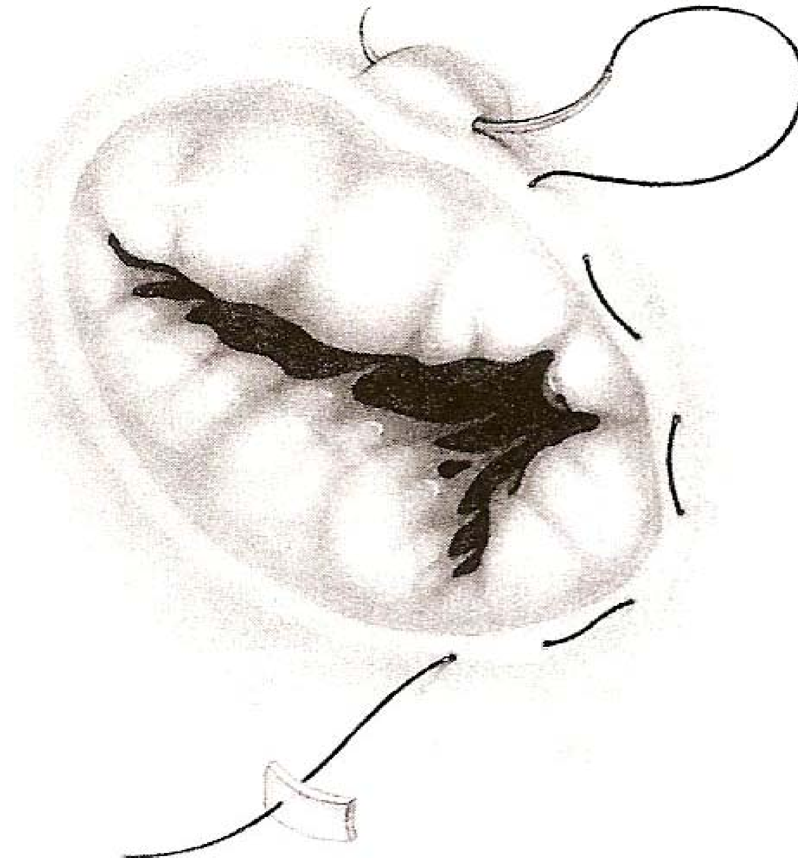


PRESENTACIÓN CLÍNICA

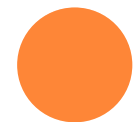
- Tradicionalmente presentan sintomatología tardía, si se presentan de forma aislada.
- Debutan con síntomas derivados del bajo gasto: astenia, anorexia y en último caso caquexia cardiaca.
- Típicamente dan clínica de FALLO DERECHO:
  - Ingurgitación venosa.
  - Hepatomegalia y ascitis.
  - Enteropatía cardiaca.



TÉCNICAS QUIRÚRGICAS-DE VEGA



De Vega et al. Rev. Esp. Cardiol. 1972;25:555-6



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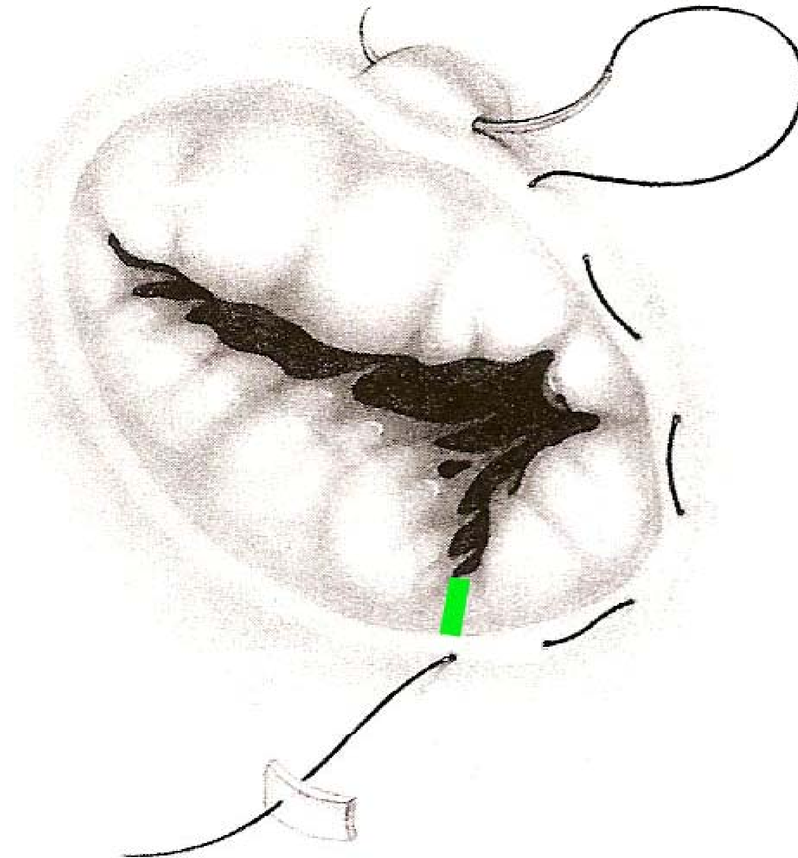

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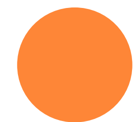

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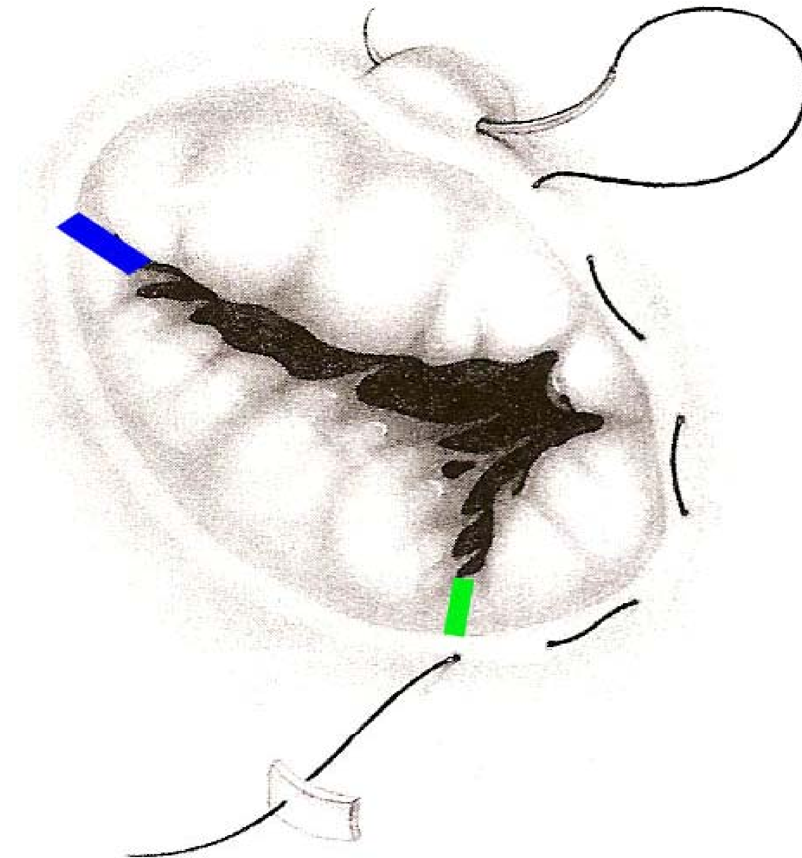
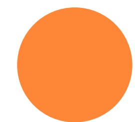
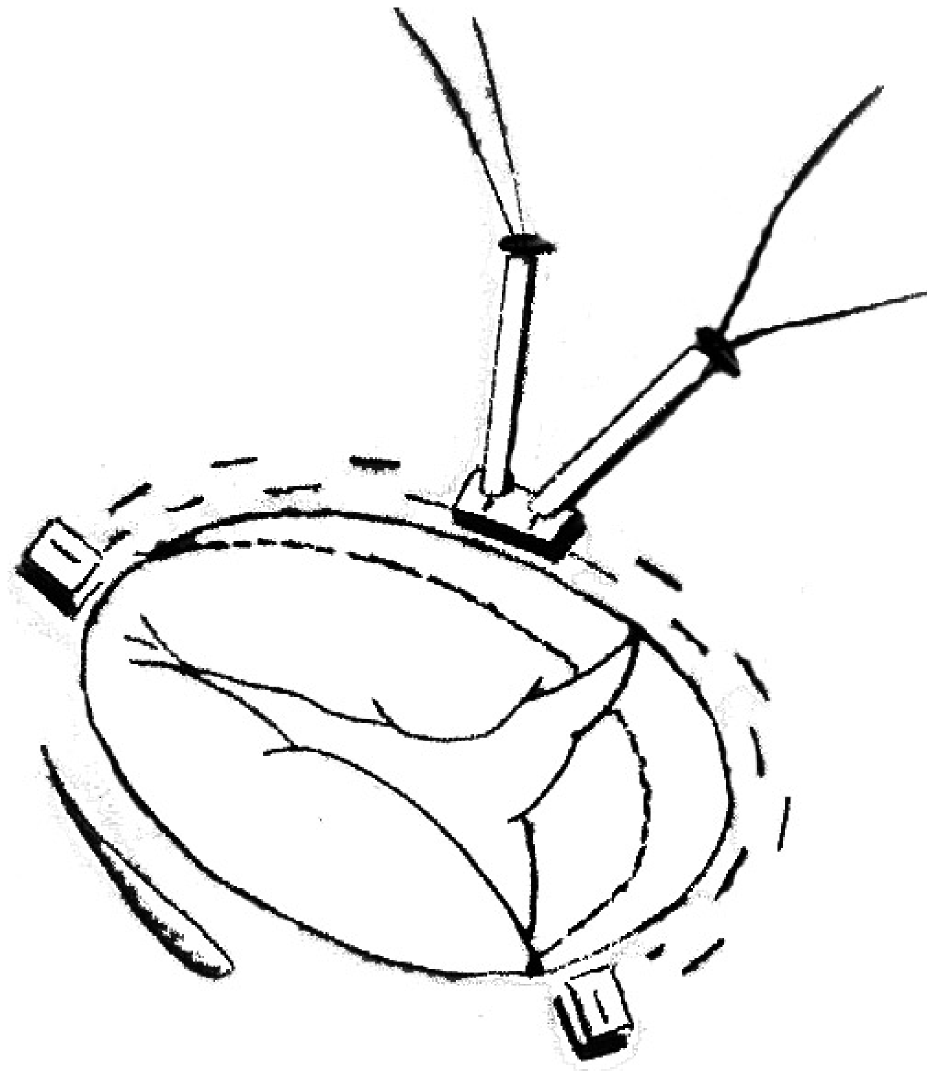
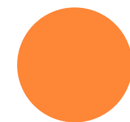


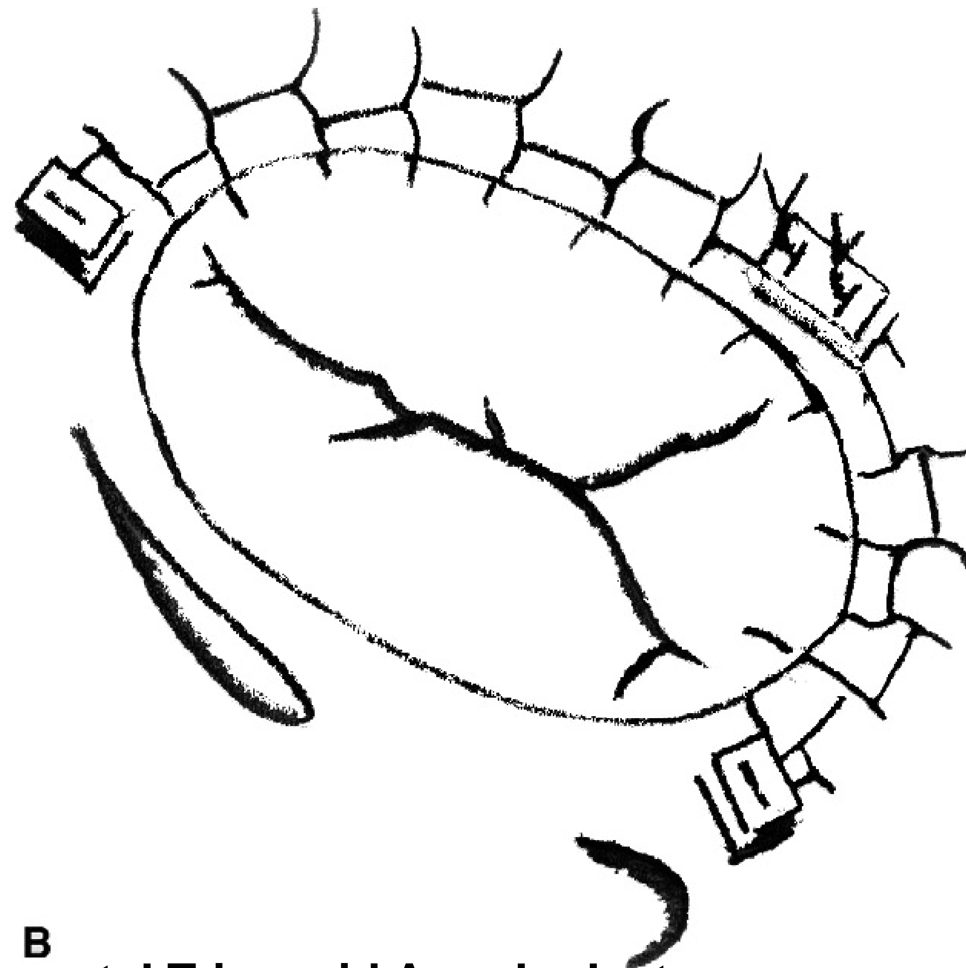
De Vega et al. Rev. Esp. Cardiol. 1972;25:555-6





Adjustable Segmental Tricuspid Annuloplasty:
A New Modified Technique
Anas Sarraj, MD, FETCS, and Juan Duarte, MD, PhD
(Ann Thorac Surg 2007;83:698 –9)





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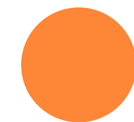

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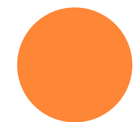
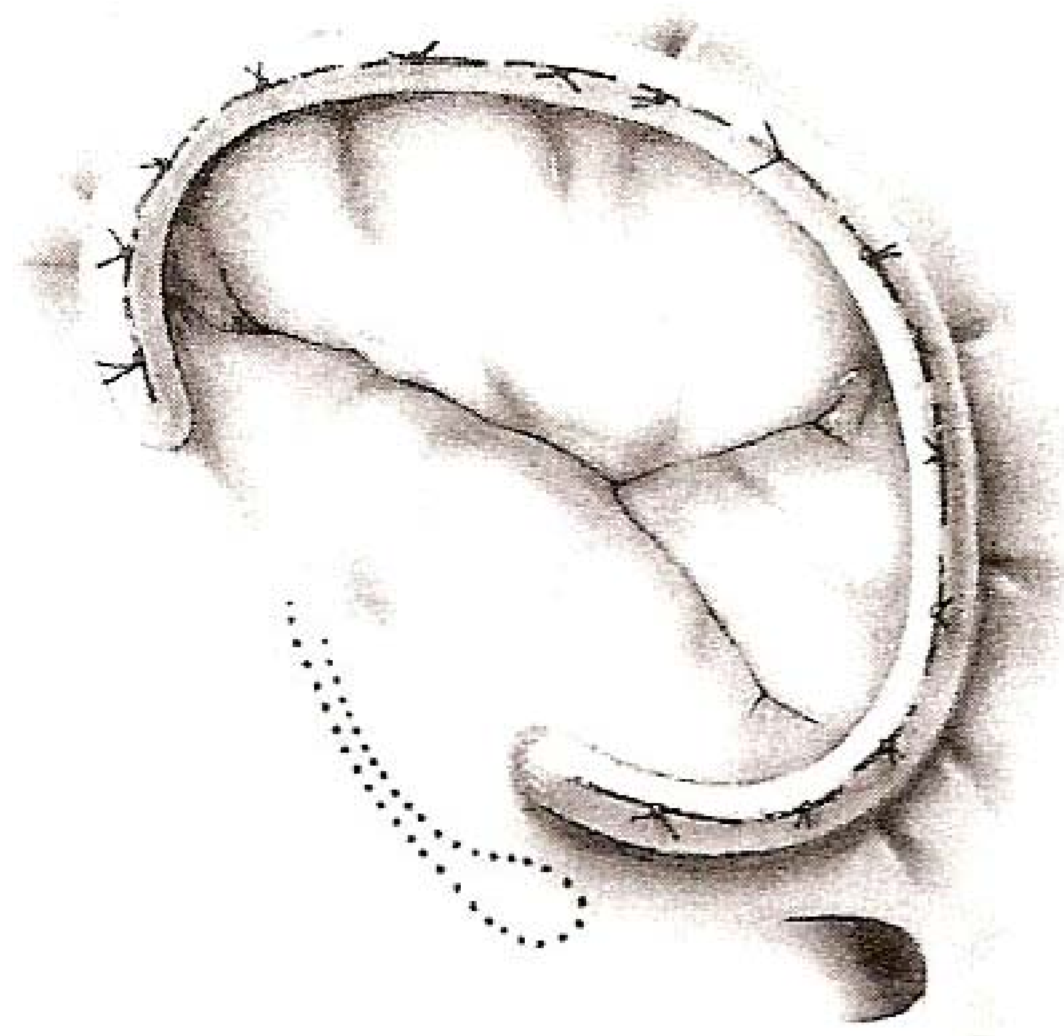
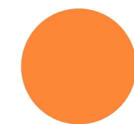


TÉCNICAS QUIRÚRGICAS-ANULOPLASTIA



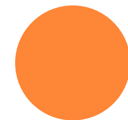


De Vega VS Anuloplastia

Tricuspid valve repair with an annuloplasty ring results in improved long-term outcomes.

Circulation 2006 Jul 4; 114:I577-81 Tang GH et al.

- *N 702 pacientes.*
- *De Vega en 493 vs 209 anuloplastias.*
- *El 74% de las ITs fueron de etiología funcional.*
- *El 80% recivieron cirugía mitral concomitante, 33% Aórtica y 14% revascularización.*
- *El seguimiento fue de seis años.*
- ***La supervivencia a largo plazo y la supervivencia libre de eventos fue significativamente mejor en el grupo de anillo.***
- ***El estudio multivariable demostró el uso de anillo como predictor independiente de sup.***

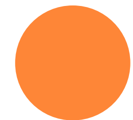


De Vega VS Anuloplastia

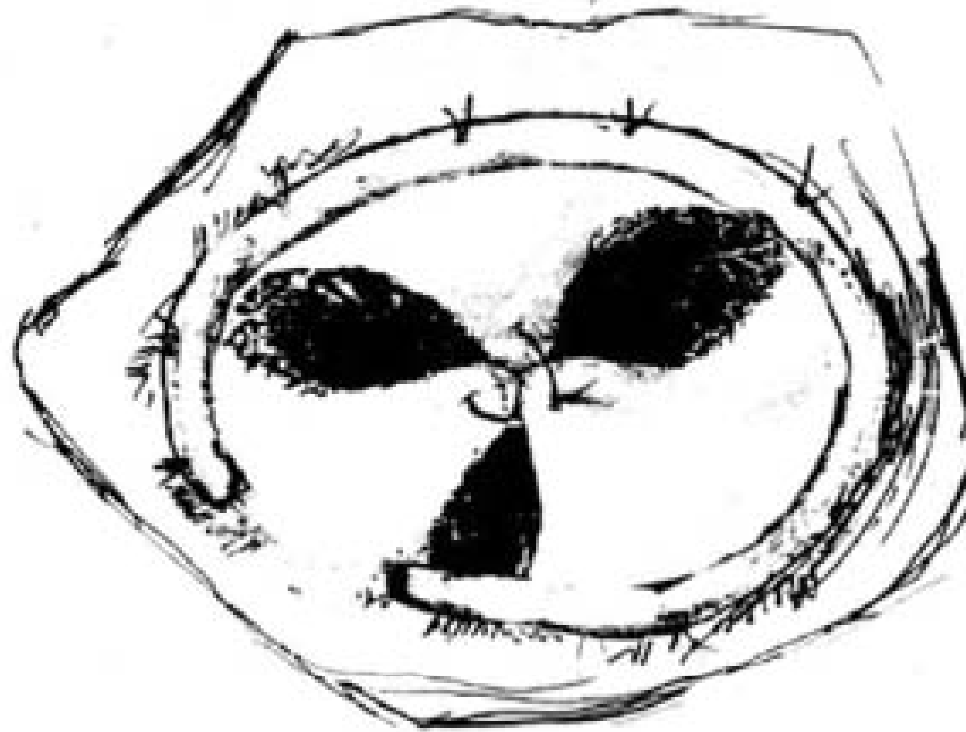
Carpentier's flexible ring versus De Vega's annuloplasty. A prospective randomized study.

Rivera R, Duran E, Ajuria M.

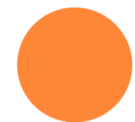
- *159 pacientes asignados para anillo de CE y 83 DV*
- *Se incluyó a pacientes con IT severa moderada, con un seguimiento total de 64 meses.*
- *Al final del seguimiento había diferencia significativa de IT residual.*
- *La presencia de patología estructural tricuspídea, así como de HTP severa, fue un predictor de IT recidivante.*
- *Retirando los pacientes con HTPsevera y alt estruct., solo se objetivó un IT residual en el grupo CE y nueve de 19 en el DV.*
- *Se obtuvieron mejores resultados en términos de MT y recurrencia de IT en el grupo de anillo.*



TÉCNICAS QUIRÚRGICAS-ALFIERI



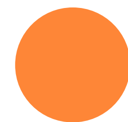
Alfieri O, et al. J Thorac Cardiovasc Surg 2003;126:75–9.



TÉCNICAS QUIRÚRGICAS-ALFIERI

- La serie inicial incluía 14 pacientes, con una mortalidad intrahospitalaria del 7%.
- El seguimiento fue de 22 meses, todos los supervivientes estaban asintomáticos.
- En el ett, 13 no presentaban IT y uno tenía IT moderada.
- El gradiente medio fue de 2.7 +/- 1.4 mmHg.
- Esta ténica es válida para insuficiencias tricuspídeas complejas, no reparables con una anuloplastia simple.

Alfieri O, et al. J Thorac Cardiovasc Surg 2003;126:75–9.



A novel technique for correction of severe tricuspid valve regurgitation due to complex lesions☆

Michele De Bonis*, Elisabetta Lapenna, Giovanni La Canna, Antonio Grimaldi, Francesco Maisano, Lucia Torracca, Alessandro Caldarola, Ottavio Alfieri

Department of Cardiac Surgery, San Raffaele University Hospital, Via Olgettina 60, 20132 Milan, Italy

Received 28 September 2003; received in revised form 24 January 2004; accepted 28 January 2004

Dr U. Giedrius (*Vilnius, Lithuania*): Why do you call this a novel technique?

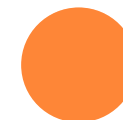
Dr DeBonis: Well, so far we didn't find this technique reported in the literature and, therefore, we though it was quite a novel approach.

Dr Giedrius: So I would like to show my first slide, okay? First slide, please. It is a comment slide, please.

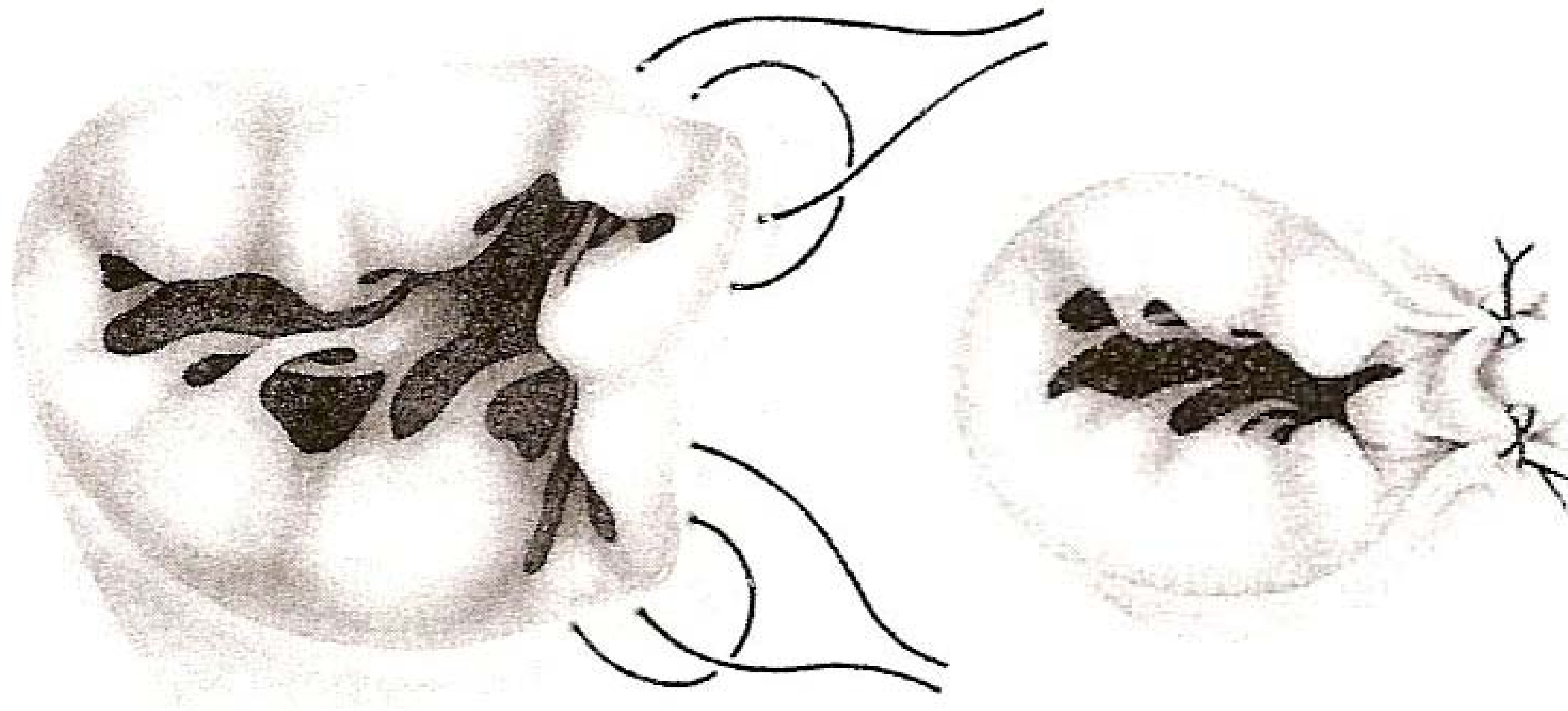
(Slide) I did this a half year ago before your team started. This is proof in Cardiovascular Surgery, 'The First Triple Orifice Repair For Tricuspid Insufficiency, First Experience From Vilnius Clinic,' and I am the surgeon who performed it. It is 13 cases. And before that, in 2000, I reported that in our local paper.

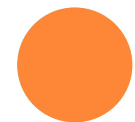
(Slide) This is a local paper of Lithuania Medicine where I described this technique, 13 cases, and the first operation was performed by myself on 22nd April of 2000. And I regret deeply because I twice sent paper to European Association for reporting and I was refused each time. So it is a little offensive for me.

(Slide) This is what it was entitled in a Budapest meeting, and next one, and this is the procedure I performed in 2000, April 22. You see, I do it a little differently.



TÉCNICAS QUIRÚRGICAS-KAY





SUSTITUCIÓN VALVULAR

- Existe mucha controversia sobre el tipo de válvula.
- Los malos resultados clásicos con las prótesis mecánicas se asociaron con trombosis.
- Existen multitud de estudios en la actualidad que no demuestran diferencias significativas en supervivencia a largo plazo entre ambas prótesis.
- Se debe seguir un algoritmo similar al de la válvula mitral para elegir el tipo de válvula.

Sanfelippo PM, Giuliani ER, Danielson GK, Wallace RB, Pluth JR, McGoon DC. Tricuspid valve prosthetic replacement: early and late results with the Starr-Edwards prosthesis. J Thorac Cardiovasc Surg 1976;71:441–5.
Jugdutt BI, Fraser RS, Lee SJ, Rossall RE, Callaghan JC. Long-term survival after tricuspid valve replacement: results with seven different prostheses. J Thorac Cardiovasc Surg 1977;74:20–7.

Long-Term Clinical Results of Tricuspid Valve Replacement

Byung-Chul Chang, MD, Sang-Hyun Lim, MD, Gijong Yi, MD, You Sun Hong, MD, Sak Lee, MD, Kyung-Jong Yoo, MD, Meyun Shick Kang, MD, and Bum Koo Cho, MD

Department of Thoracic and Cardiovascular Surgery, Cardiovascular Center, Severance Hospital, Yonsei University College of Medicine, Seoul, South Korea

Methods. Between 1978 and 2003, we performed 138 TVR (35 bioprosthetic, 103 mechanical) in 125 patients (50

years was 73.8 ± 8.5% (bioprosthetic: 70.2 ± 10.4%, mechanical: 66.0 ± 19.4%). At 15 years, freedom from reoperation was 66.3 ± 9.4% (bioprosthetic: 55.1 ± 13.8%, mechanical: 86.0 ± 6.2%) and freedom from valve-related events was 49.9 ± 8.0%. The linearized incidence of valve thrombosis was 1.28%/patient-year (bioprosthetic: 0, mechanical: 1.92), anticoagulation-related bleeding was 0.37%/patient-year (mechanical: 0.54), reoperation was 1.71%/patient-year (bioprosthetic: 2.68, mechanical: 1.25), and valve-related events were 4.33%/patient-year (bioprosthetic: 3.83, mechanical: 4.6).

IT y Trasplante cardiaco.

Donor Tricuspid Annuloplasty During Orthotopic Heart Transplantation: Long-Term Results of a Prospective Controlled Study

Valluvan Jeevanandam, MD, Hyde Russell, MD, Paul Mather, MD,
Satoshi Furukawa, MD, Allen Anderson, MD, and Jaishankar Raman, MD, PhD

Departments of Surgery and Medicine, University of Chicago, Chicago, Illinois; Department of Surgery, Temple University, Philadelphia, Pennsylvania; and Department of Medicine, Thomas Jefferson University, Philadelphia, Pennsylvania

- La incidencia de IT postoperatoria oscila entre 47-98% según las series.
- Dicha incidencia aumenta con la técnica biatrial y está relacionada con una disrupción del anulo tricuspideo por la sutura.
- Otras posibles causas son la disfunción primaria del injerto y la HTP establecida.
- La aparicíón de IT postoperatoria aumenta en un 30% el riesgo de muerte.
- La AT de De Vega es una opción válida y sencilla para prevenir la IT.