

PLACE

PLATFORM OF LABORATORIES FOR ADVANCES IN CARDIAC EXPERIENCE

ROMA

Centro Congressi
di Confindustria

**Auditorium
della Tecnica**

9^a Edizione

30 Settembre

1 Ottobre

2022



TEN MINUTES ANSWERS IN CARDIOLOGIA D'URGENZA (II) DISSECAZIONE AORTICA DALLA DIAGNOSI ALLA TERAPIA

IL CARDIOCHIRURGO
Bertoldo Fabio



Dalla diagnosi ... alle Linee Guida per la terapia






Treatment of aortic dissection

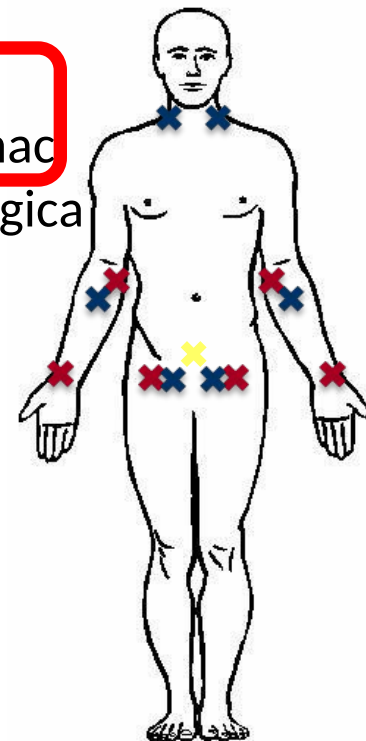
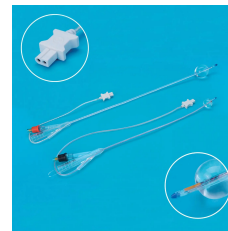
Recommendations	Class	Level
In all patients with AD, medical therapy including pain relief and blood pressure control is recommended.	I	C
In patients with type-A AD, urgent surgery is recommended.	I	B
In patients with acute type-A AD and organ malperfusion, a hybrid approach (i.e. ascending aorta and/or arch replacement associated with any percutaneous aortic or branch artery procedure) should be considered.	IIa	B
In uncomplicated type-B AD, medical therapy should always be recommended.	I	C
In uncomplicated type-B AD, TEVAR should be considered.	IIa	B
In complicated type-B AD, TEVAR is recommended.	I	C
In complicated type-B AD, surgery may be considered.	IIb	C

ESC Guidelines (European Heart Journal 2014;35:2873-2926)



Gestione pre-operatoria in Sala Rossa

- ✓ **Controllo del dolore, della frequenza cardiaca e della pressione arteriosa sistemica (P.A.S. 100-120 mmHg);**  -bloccanti, altri farmaci
- ✓ Sedazione e intubazione oro-tracheale, previa valutazione neurologica
- ✓ Accessi venosi (centrali e/o periferici) 
- ✓ Accessi arteriosi (arti superiori e/o arti inferiori) 
- ✓ Cateterismo vescicale (catetere con termistore) 
- ✓ Tricotomia totale 





Dalla diagnosi ... alle Linee Guida per la terapia

Treatment of aortic dissection

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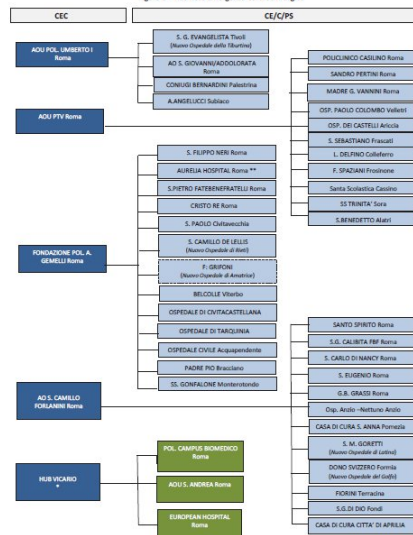
Rete Emergenza Cardiochirurgica



Regione Lazio DIREZIONE SALUTE E INTEGRAZIONE SOCIO SANITARIA Atti dirigenziali di Gestione

Determinazione 24 giugno 2022, n. 038250
Approvazione del "Piano di Rete Emergenza Cardiochirurgica" - in attuazione dell'Accordo della Conferenza Stato-Regioni e Privato Attuato dal 24 gennaio 2018 (PnA Atti n. 14/C/CS), al verbale del punto 8.1 dell'Allegato 1 al Decreto attuativo 2 aprile 2015, n. 70, nel documento "Linee guida per la revisione delle reti cliniche - Le reti tempo dipendenti".

Figura 1 – REC Rete Emergenza Cardiochirurgica

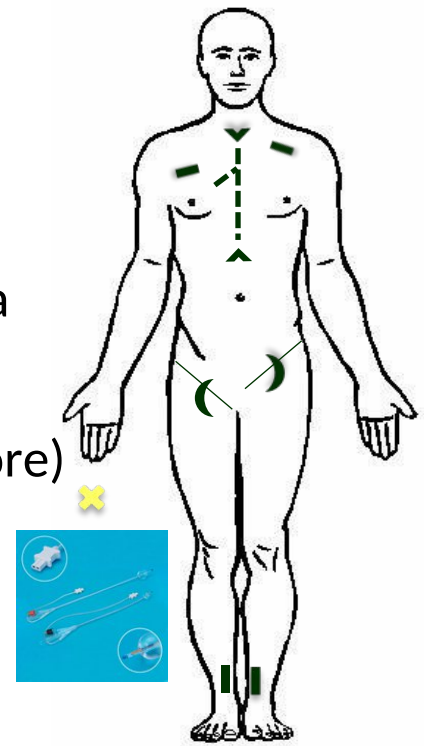


*Turnazione settimanale predisposta da ARES 118



Gestione pre-operatoria in Sala Operatoria

- ✓ Posizione sul tavolo operatorio
- ✓ Marcatura dei siti chirurgici _
- ✓ Monitorizzazione anestesiologicala e anestesia
 - Accessi venosi (centrali e/o periferici) ✗
 - Accessi arteriosi (arti superiori e/o arti inferiori) ✗
- ✓ Cateterismo vescicale (catetere con termistore) ✗
- ✓ Tricotomia totale



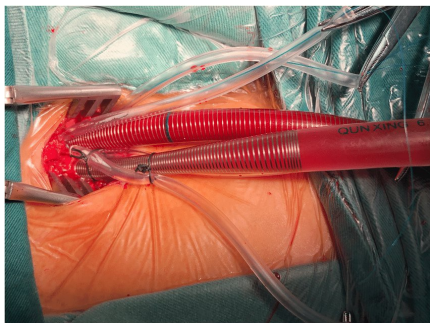
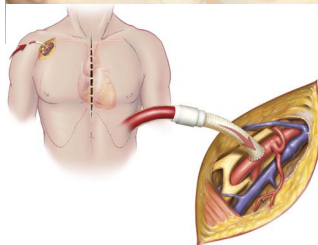
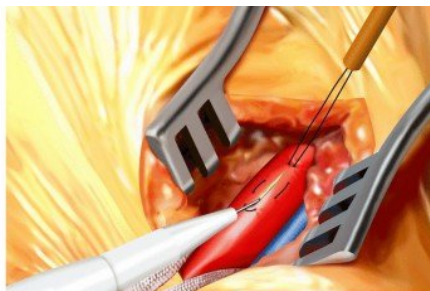


Gestione pre-operatoria in Sala Operatoria





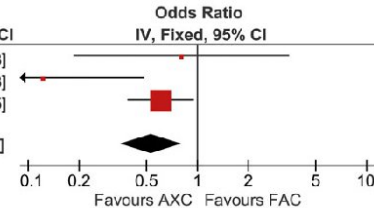
Strategie di cannulazione



Outcome: in-hospital mortality

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Fixed, 95% CI
Di Eusanio 2013	-0.22	0.7486	7.9%	0.80 [0.19, 3.48]
Mizumi 2005	-2.1	0.7	9.0%	0.12 [0.03, 0.48]
Nouraei 2007	-0.5	0.23	83.2%	0.61 [0.39, 0.95]
Total (95% CI)			100.0%	0.54 [0.36, 0.81]

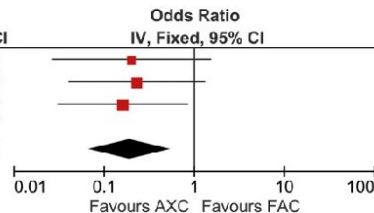
Heterogeneity: Chi² = 5.03, df = 2 (P = 0.08); I² = 60%
 Test for overall effect: Z = 2.96 (P = 0.003)



Outcome: permanent neurological deficit

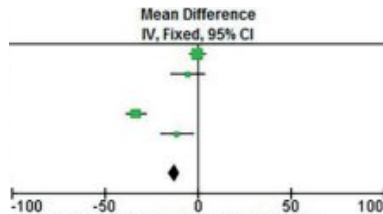
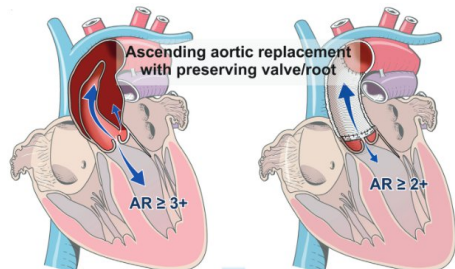
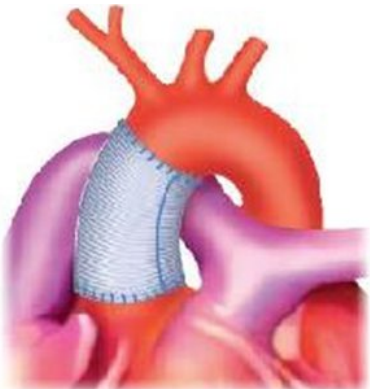
Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Fixed, 95% CI
Di Eusanio 2013	-1.61	1.04	25.9%	0.20 [0.03, 1.53]
Halderwang 2012	-1.47	0.89	35.4%	0.23 [0.04, 1.32]
Nouraei 2007	-1.83	0.85	38.8%	0.16 [0.03, 0.85]
Total (95% CI)			100.0%	0.19 [0.07, 0.54]

Heterogeneity: Chi² = 0.09, df = 2 (P = 0.96); I² = 0%
 Test for overall effect: Z = 3.11 (P = 0.002)

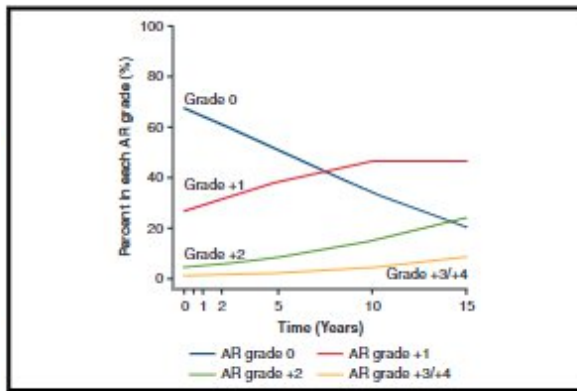




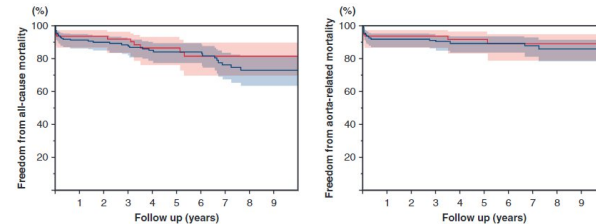
Sostituzione dell'aorta toracica ascendente



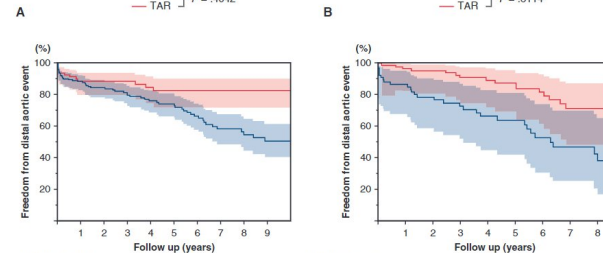
Hsieh WC, et al. (Eur Rev Med Pharmacol Sci 2019;23:9590-9611)



Kim DJ, et al. (J Thorac Cardiovasc Surg 2020;160:1421-1430)



Time (years)	1	2	3	4	5	6	7	8	9	
AAR	169	149	129	108	94	83	74	54	41	33
TAR	84	71	60	54	45	37	31	25	18	13



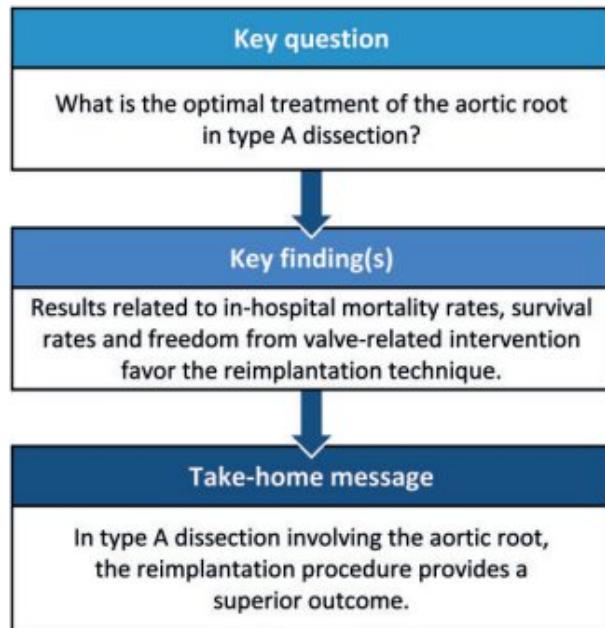
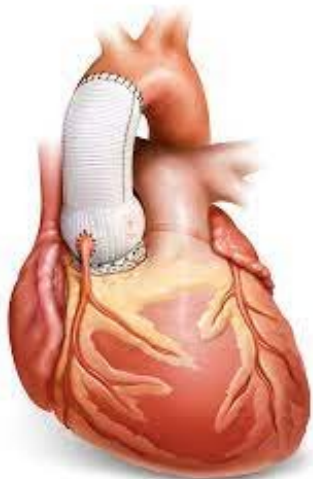
Time (years)	1	2	3	4	5	6	7	8	9	
AAR	169	142	117	99	82	73	57	40	31	24
TAR	84	67	57	51	42	33	28	22	15	10

Uchida K, et al. (J Thorac Cardiovasc Surg 2021;162:1025-1031)

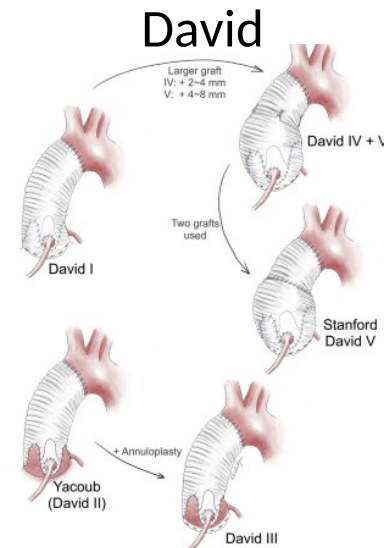


Procedure su radice aortica e valvola aortica

Bentall-De Bono



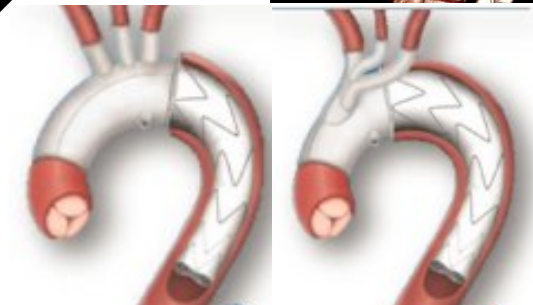
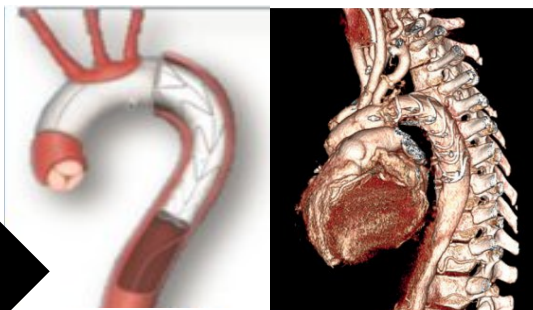
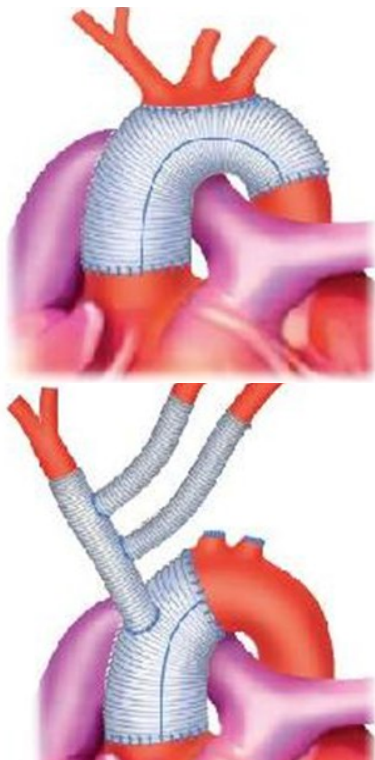
Mosbahi S, et al. (Eur J Cardiothorac Surg 2019;55:201-209)



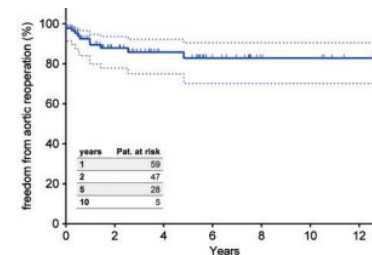
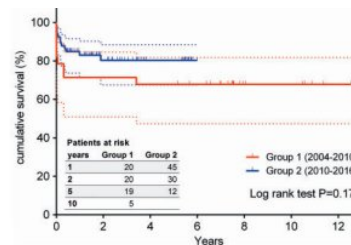


Procedure su arco aortico

Frozen Elephant Trunk



Jakob H, et al. (J Card Surg. 2021;36:1814-1817)



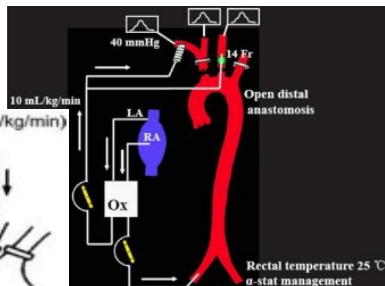
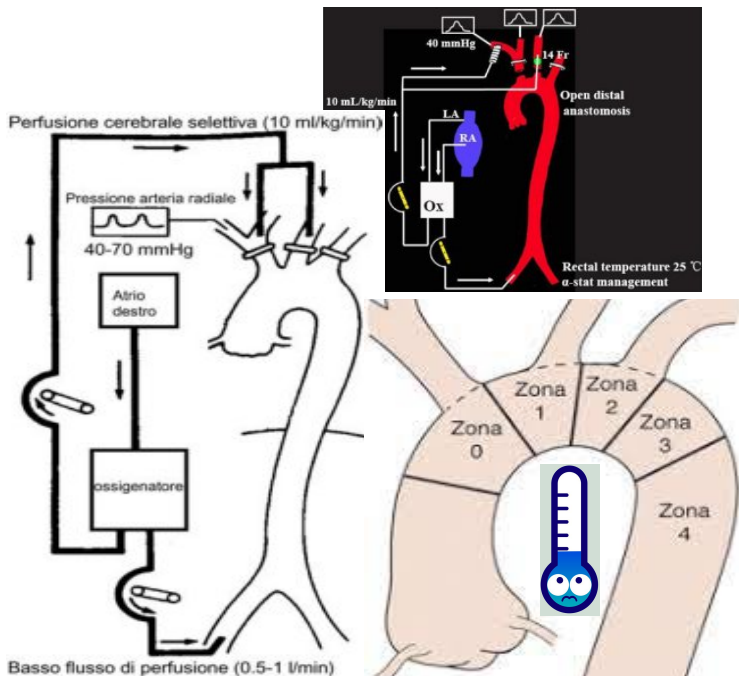
Lesione del midollo spinale: 5%
 (Group 1: 7% vs Group 2: 5%; P = 0.63)

Shrestha M, et al. (Eur J Cardiothorac Surg 2017;51:i34-i39)



Strategie protettive cerebrali e multiorgano

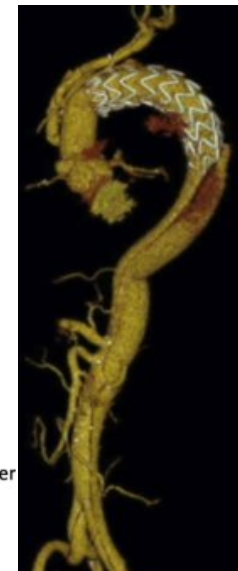
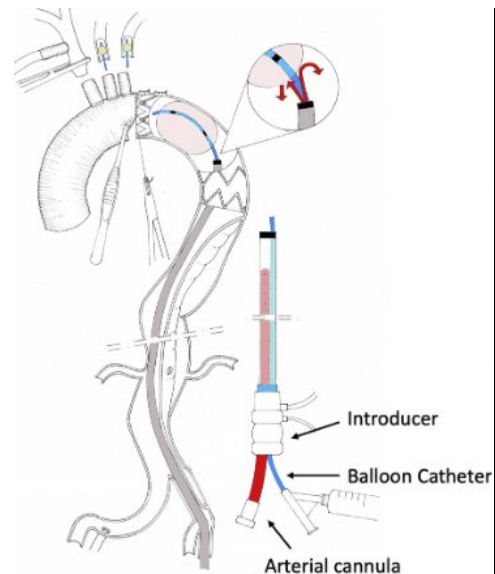
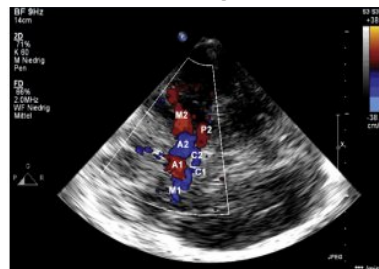
Con  Arresto circolatorio ipotermico  Senza



NIRS



TDS





Dalla diagnosi ... alle Linee Guida per la terapia

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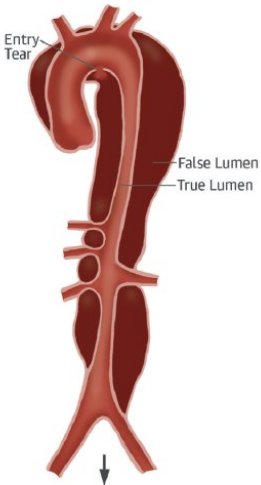
ESC Guidelines (European Heart Journal 2014;35:2873-2926)





Gestione della sindrome da malperfusione

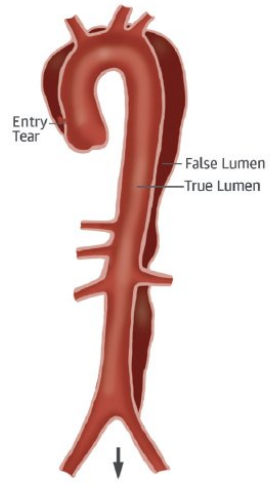
Complicated
Presence of Malperfusion



Adapt Surgical Strategy to Organ System(s) Affected by Malperfusion

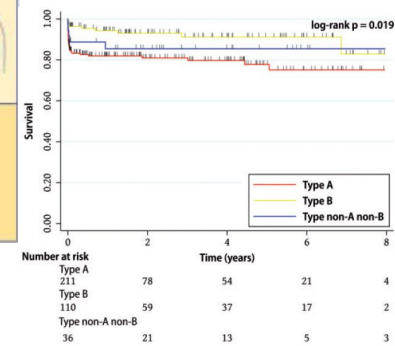
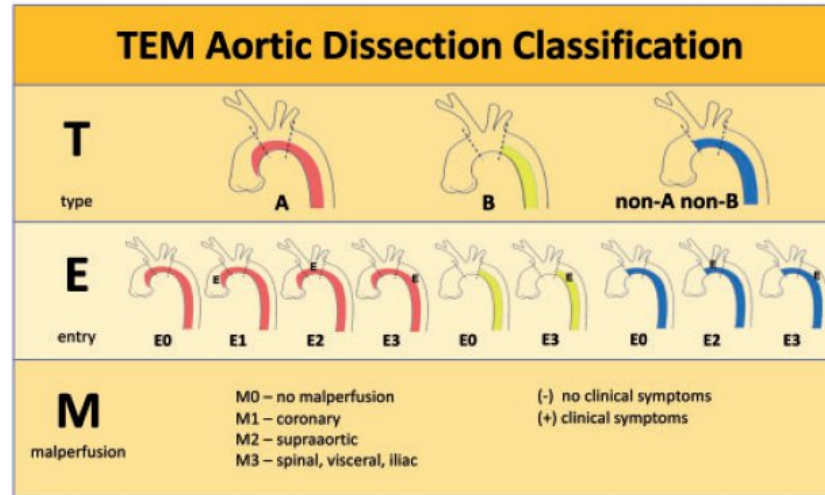
Proceed with Classical Surgical Repair Adding Individual Malperfusion-Resolving Strategy

Uncomplicated
Absence of Malperfusion



Proceed with Classical Surgical Repair

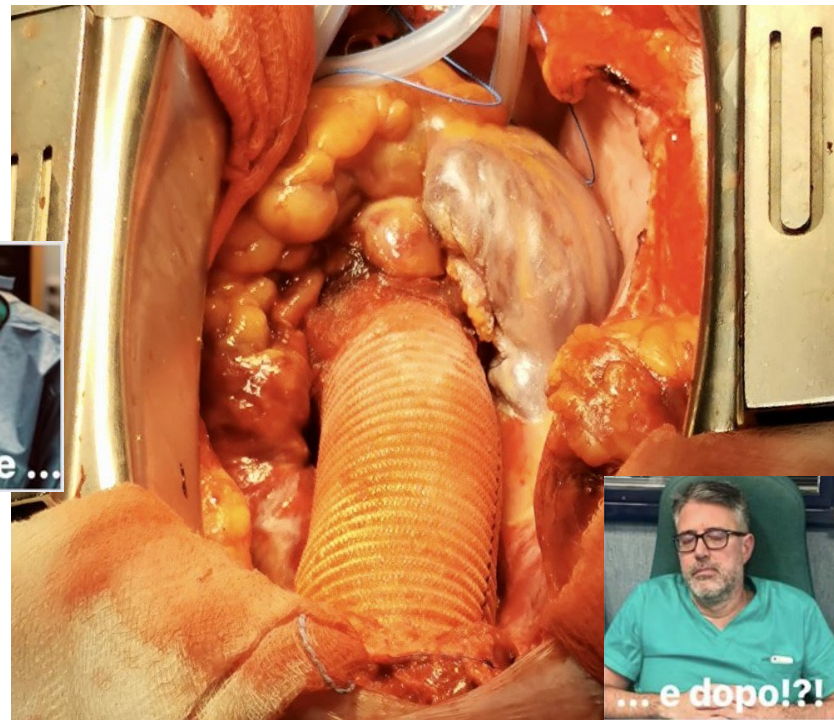
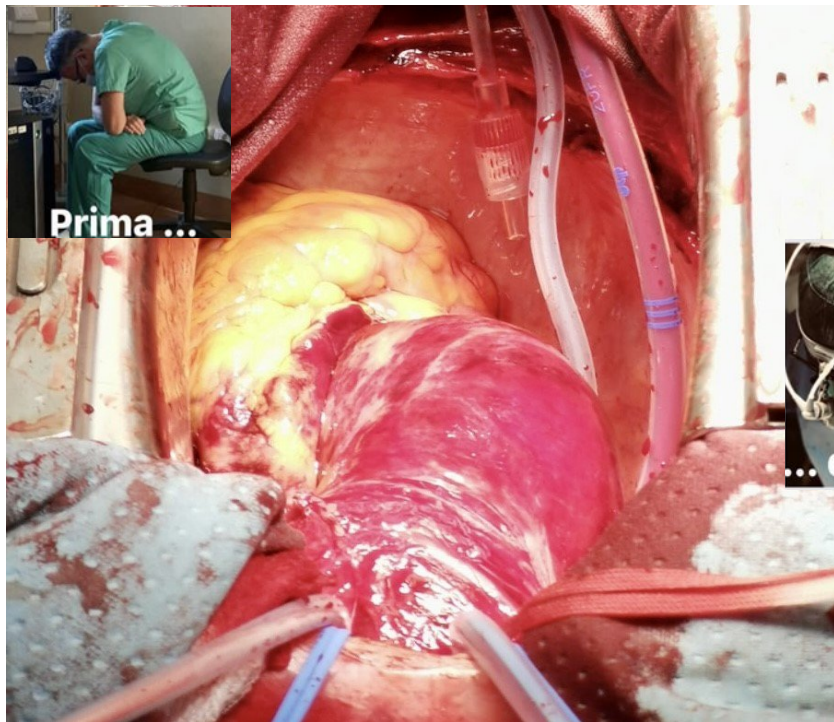
The "TEVAR-First" Approach to DeBakey I Aortic Dissection With Mesenteric Malperfusion
 Leshnowar BG, et al. (Ann Thorac Surg 2014;97:693-696)



Czerny M, et al. (J Am Coll Cardiol 2015;65:2628-2635)
 Sievers H-H, et al. (Interact CardioVasc Thorac Surg 2020;30:451-457)
 Czerny M, and Rylski B (European Heart Journal 2022;43:53-55)



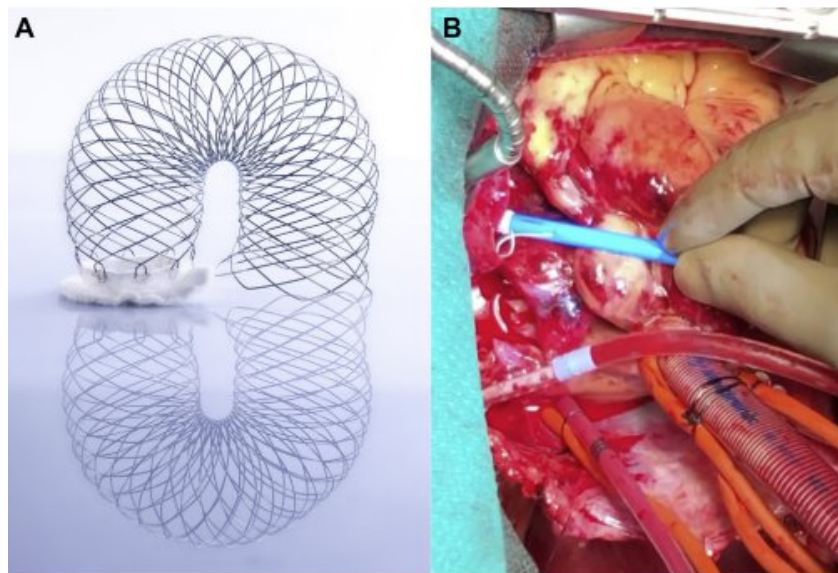
Dalla diagnosi .. alla terapia chirurgica





Prospettive future

AMDS: Ascyrus Medical Dissection Stent



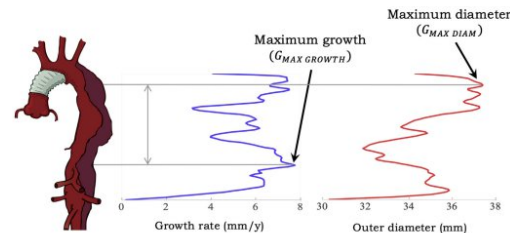


Follow-up

GDIS

Guideline-directed imaging surveillance

Tomografia computerizzata o Risonanza Magnetica
 a 6 mesi, a 12 mesi e, poi, ogni anno

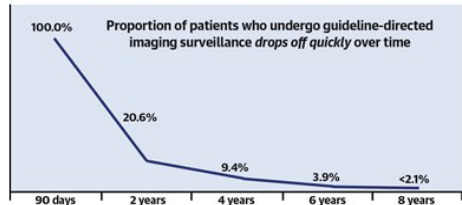


Ismaguilova A, et al. (Ann Thorac Surg 2021;111:615-622)

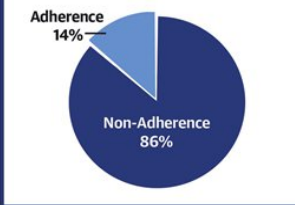
A Population-Based Cohort Study
 Ontario, Canada 2005-2018



Patients Who Survive 90 Days Post-op (n =888)



Patients with Guideline-Directed Imaging Surveillance Throughout Follow-Up



Long-Term Outcomes

17% Reintervention at 10 Years

71% Survival at 10 Years

An KR, et al. (J Am Coll Cardiol 2021;78:1863-1871)



Ho D, et al. (J Med Radiat Sci 2017;64:10-17)

Gomes EN, et al. (Braz J Cardiovasc Surg 2018;33:490-495)



Take home messages

- ✓ **Consapevolezza:** innanzitutto, pensare alla sindrome aortica ... pensare all'aorta
- ✓ **Valutazione** (età, condizioni cliniche generali, classificazione TEM, etc.)
- ✓ **Collaborazione** con l'Aortic Team ... con l'Aortic Network ... per l'obiettivo comune: iniziare l'intervento il prima possibile e nelle migliori condizioni possibili
- ✓ **Follow-up:** razionalizzazione degli esami diagnostici e sensibilizzazione all'aderenza
- ✓ **Screening** per i Familiari di 1° grado (ECG, TTE e counseling genetico)
- ✓ **Consapevolezza:** diffondere la conoscenza e incrementare la consapevolezza



Aortic Dissection Awareness Day

Directa Streaming
via Canale ufficiale

POLICLINICO TOR VERGATA

PTV TOR VERGATA

Lunedì 19 settembre 2022
GIORNATA MONDIALE DELLA CONSAPEVOLEZZA SULLA PATOLOGIA AORTICA

INCONTRO tra Pazienti, Familiari e Associazioni con il Centro di Riferimento per la Sindrome di Marfan e Patologie Correlate del Policlinico Tor Vergata

PRESENTAZIONE del progetto e del libro:

MarFAVOLANDO
da un'idea di Angela Infante ed a cura dell'Associazione Sindrome di Marfan odv

Saluti Istituzionali
Giuseppe Quattrocchi
Antonio Corrado - Centro di Riferimento per la Sindrome di Marfan e Patologie Correlate
Nathan Leviadi Chiron
Renzo Gatti - Direttore UO di Anni di Impiego
Marco Martini
Dimitri Corrado - Patologo di Impiego

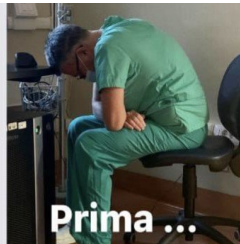
Apertura Incontro
Giovanni Ruvullo
Renzo Gatti - Centro di Riferimento per la Sindrome di Marfan e Patologie Correlate
Chiara Caporali
Chiara Caporali - Presidente Associazione Marfan Awareness Day - per l'Italia
Teresa Sideri-Rand
Presidentessa "Tor Vergata Awareness Day"

La patologia aortica
Diletta Corrado
Diletta Corrado - Centro di Riferimento per la Sindrome di Marfan e Patologie Correlate

MarFAVOLANDO: dal progetto ... al libro
Moderatrice: Anna Milla Taranto
Spettacolo con: Anna Milla Taranto
Maria Ciriello Rocchia
Margherita - Presidente Associazione di Marfan
Angela Infante
Cantante del progetto del libro
Corrado - Centro di Riferimento per la Sindrome di Marfan e Patologie Correlate

ospite Speciale
Luca Vitale
Autor - IFA

ORE 17.00
AULA ANFITRATTO GIUBILEO 2000
POLICLINICO TOR VERGATA
Viale Oxford 81 - 00133 Roma
www.placeonline.it



THINK AORTA
and save a life

#AortaEd
#September19

Vi aspettiamo ...
Martedì
19 settembre 2023

