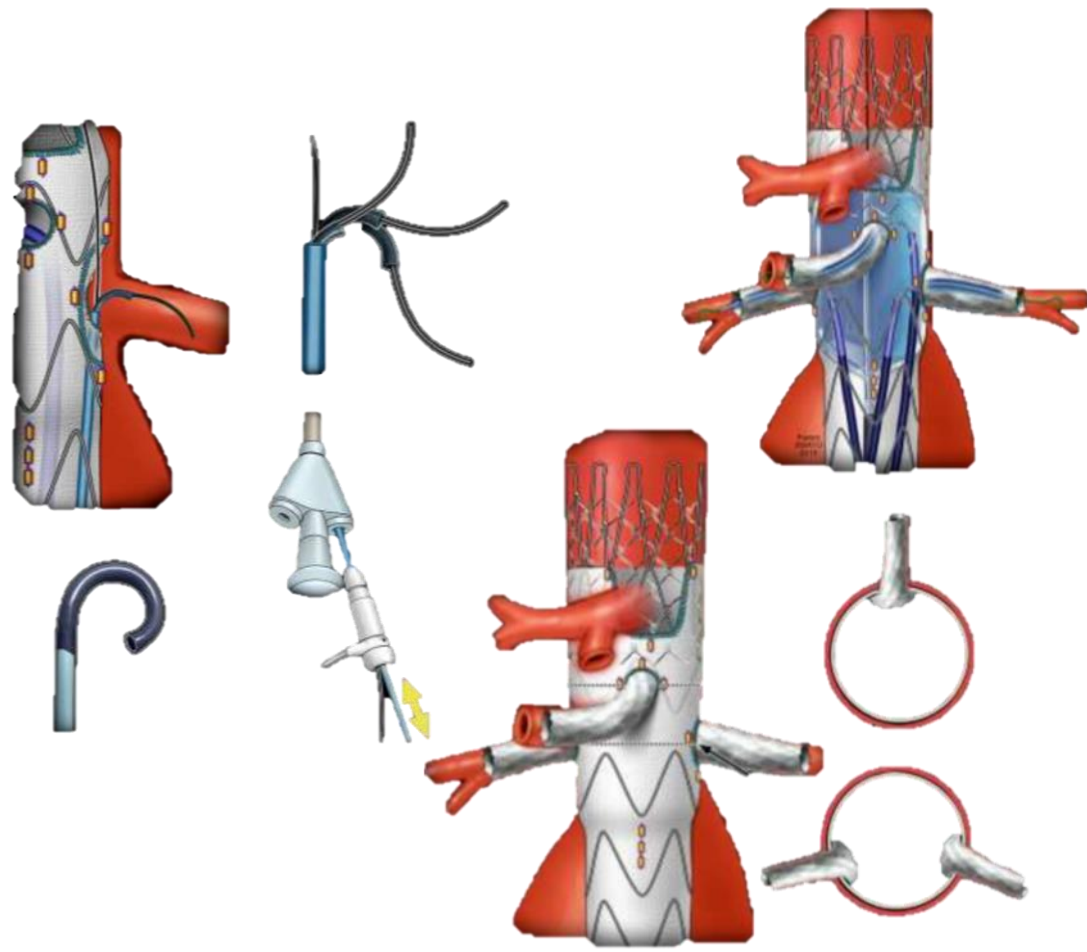
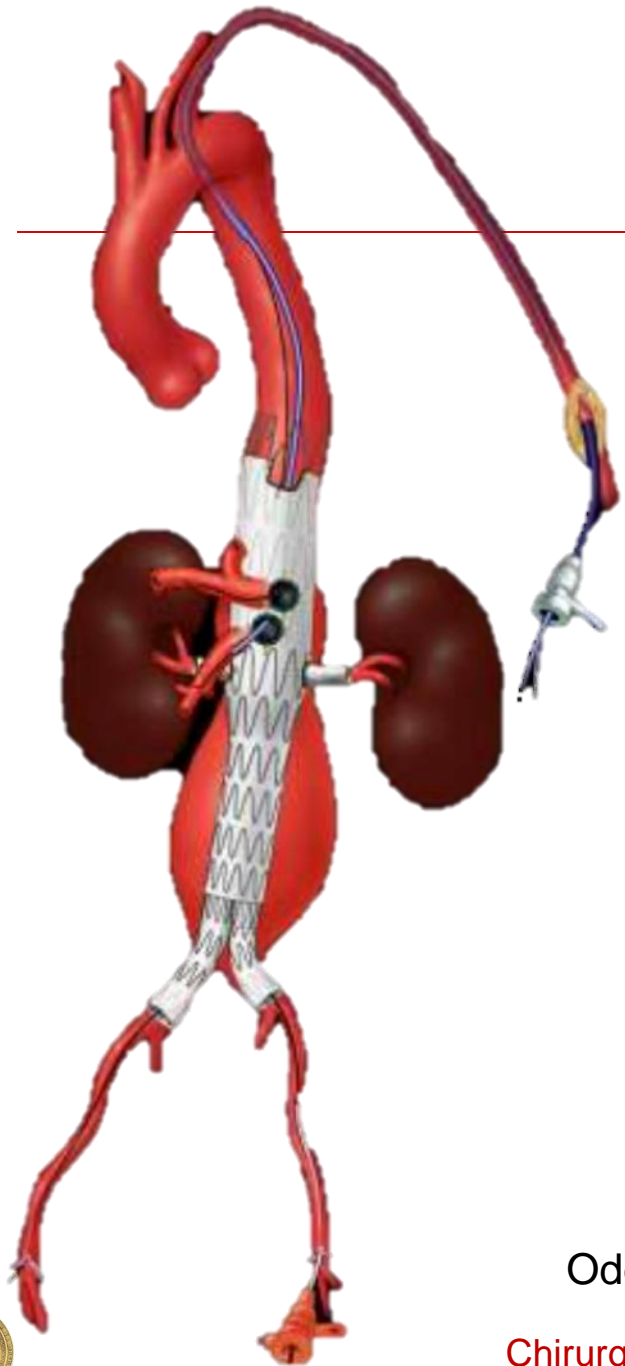


II PARTE

FEVAR

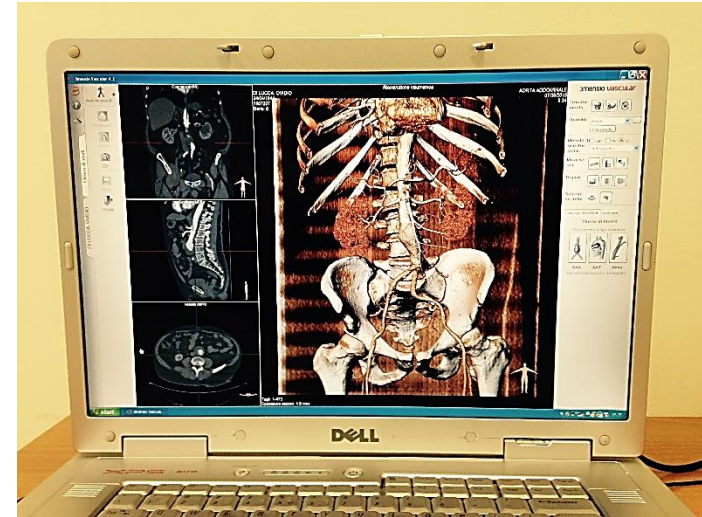
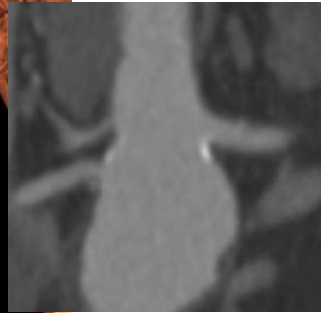
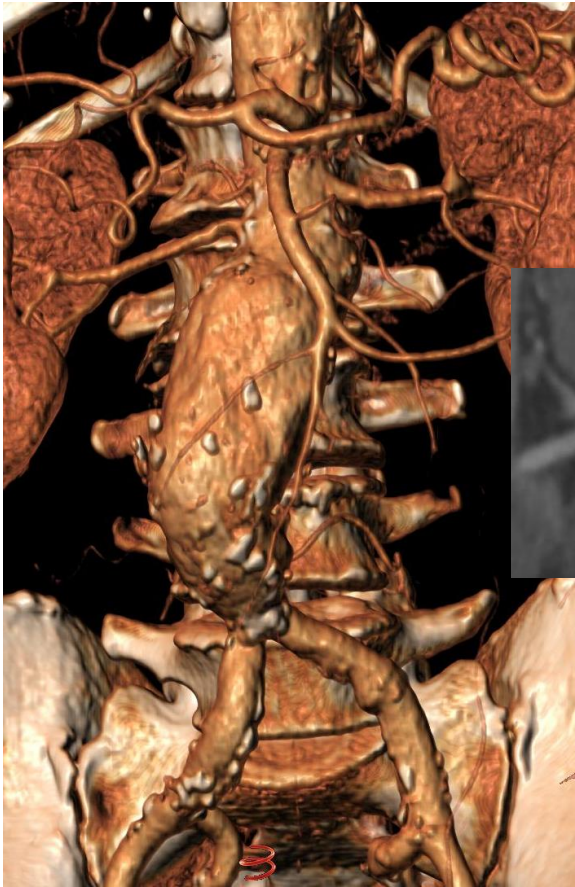


Oderich Atlas of FEVAR, BEVAR and Parallel Techniques, 2016

Chirurgia Vascolare – Università di Bologna



Pianificazione Preoperatoria

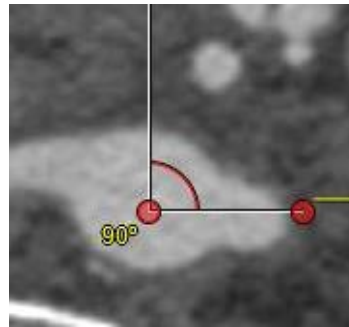


- CTA
- Dedicated Software

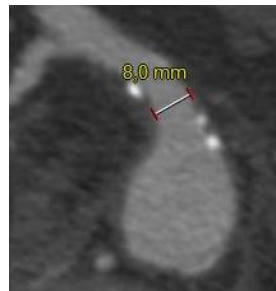
FEVAR

L'**anatomia** dei vasi viscerali **varia** da paziente a paziente in termini di:

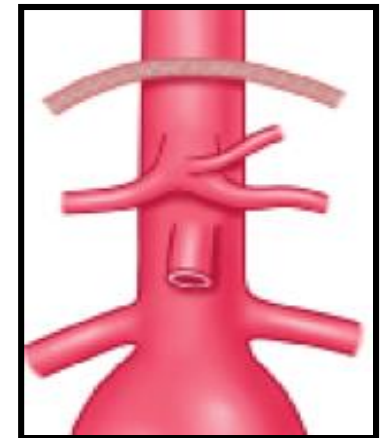
● **Angolo di emergenza**



● **Diametro**

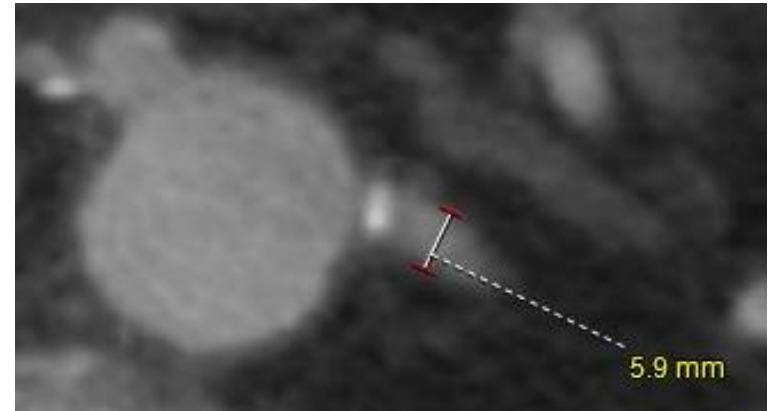
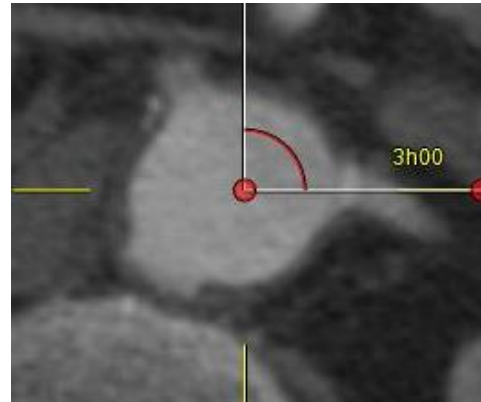
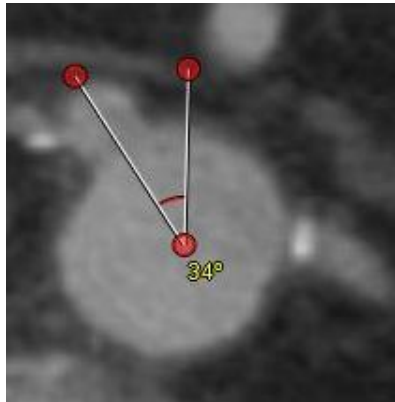
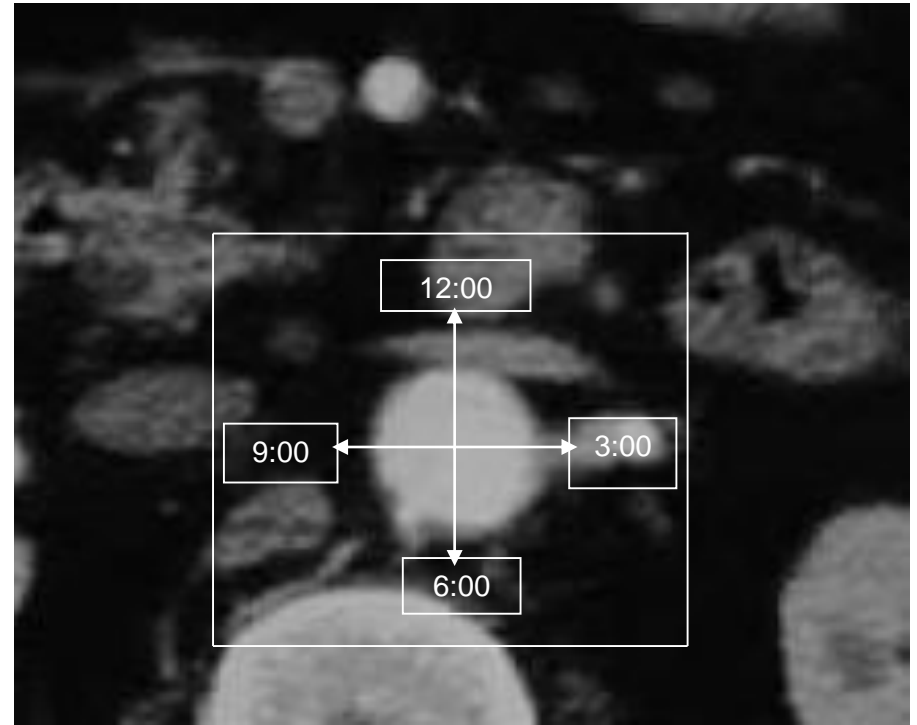
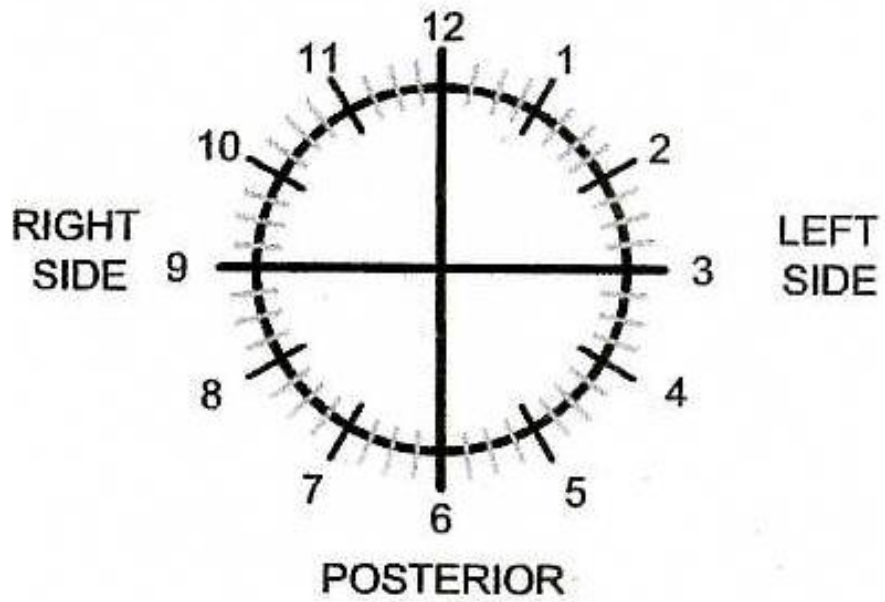


● **Lunghezza**

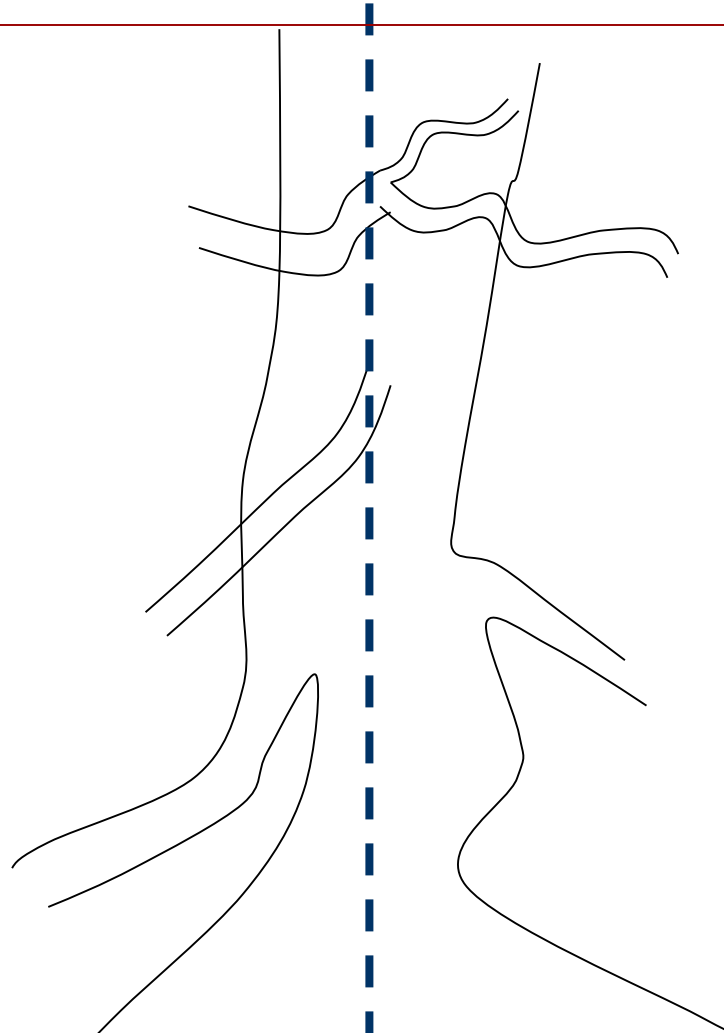


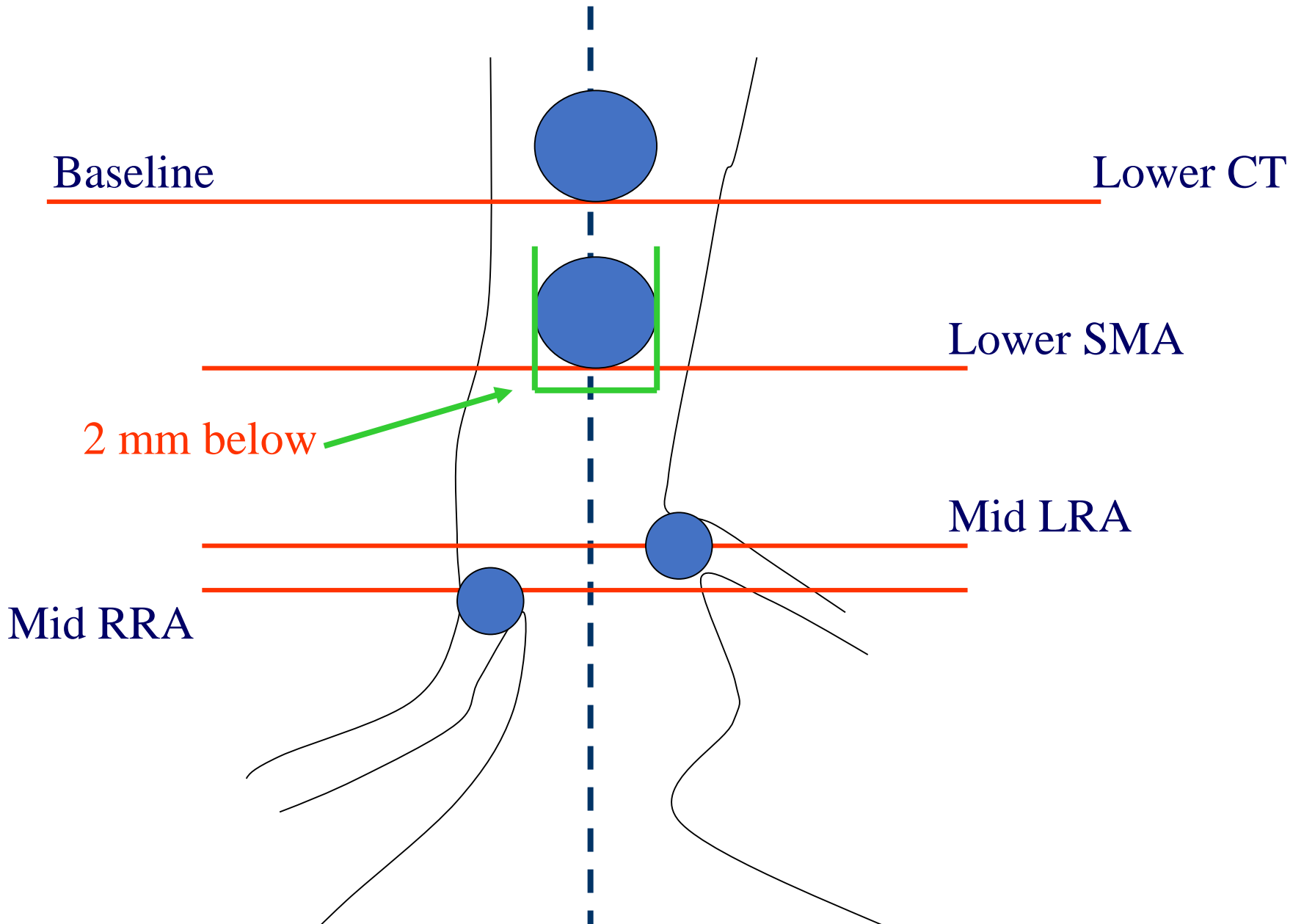
CLOCK POSITION

ANTERIOR

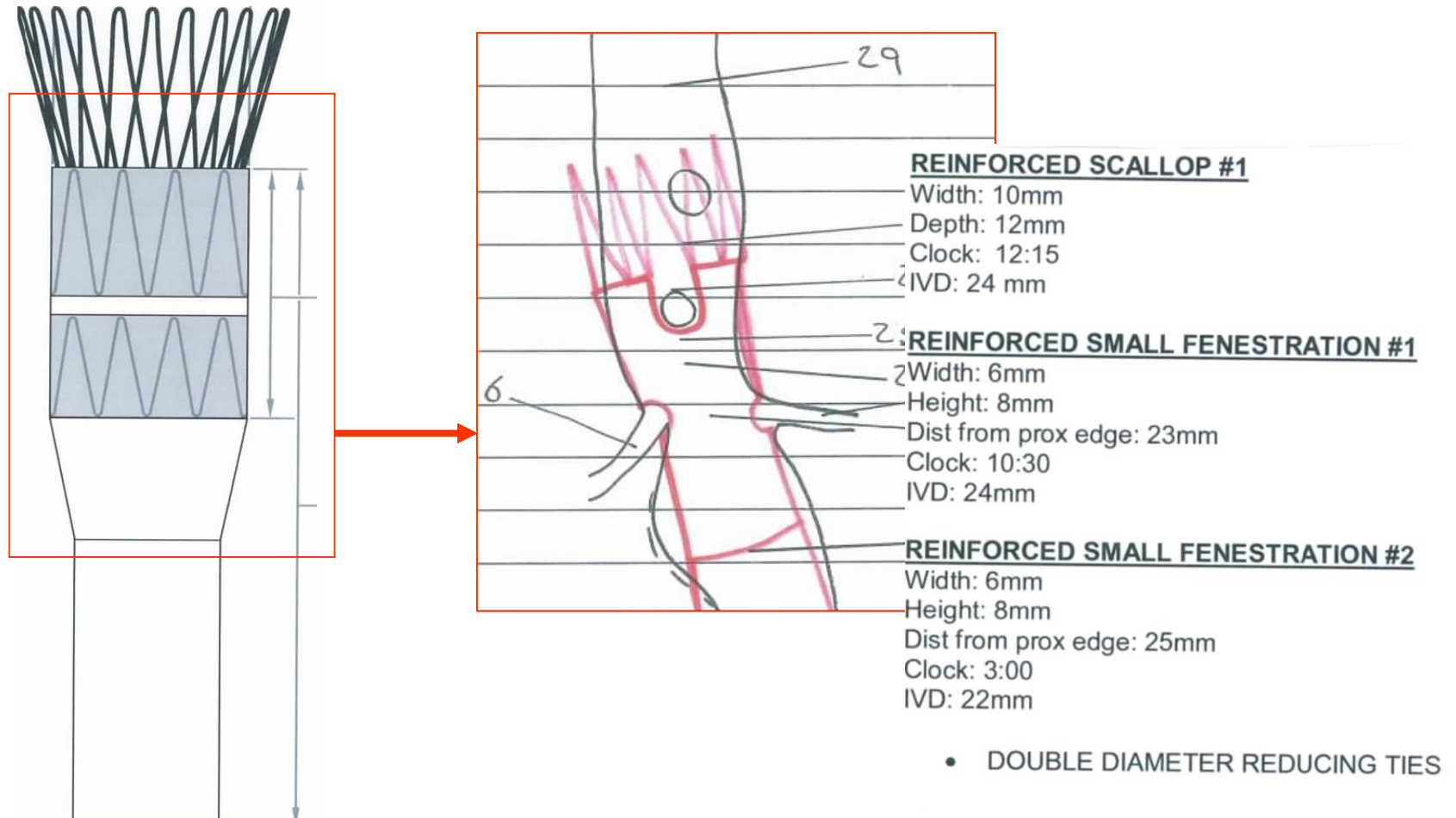


Visceral vessels **Distance** evaluation

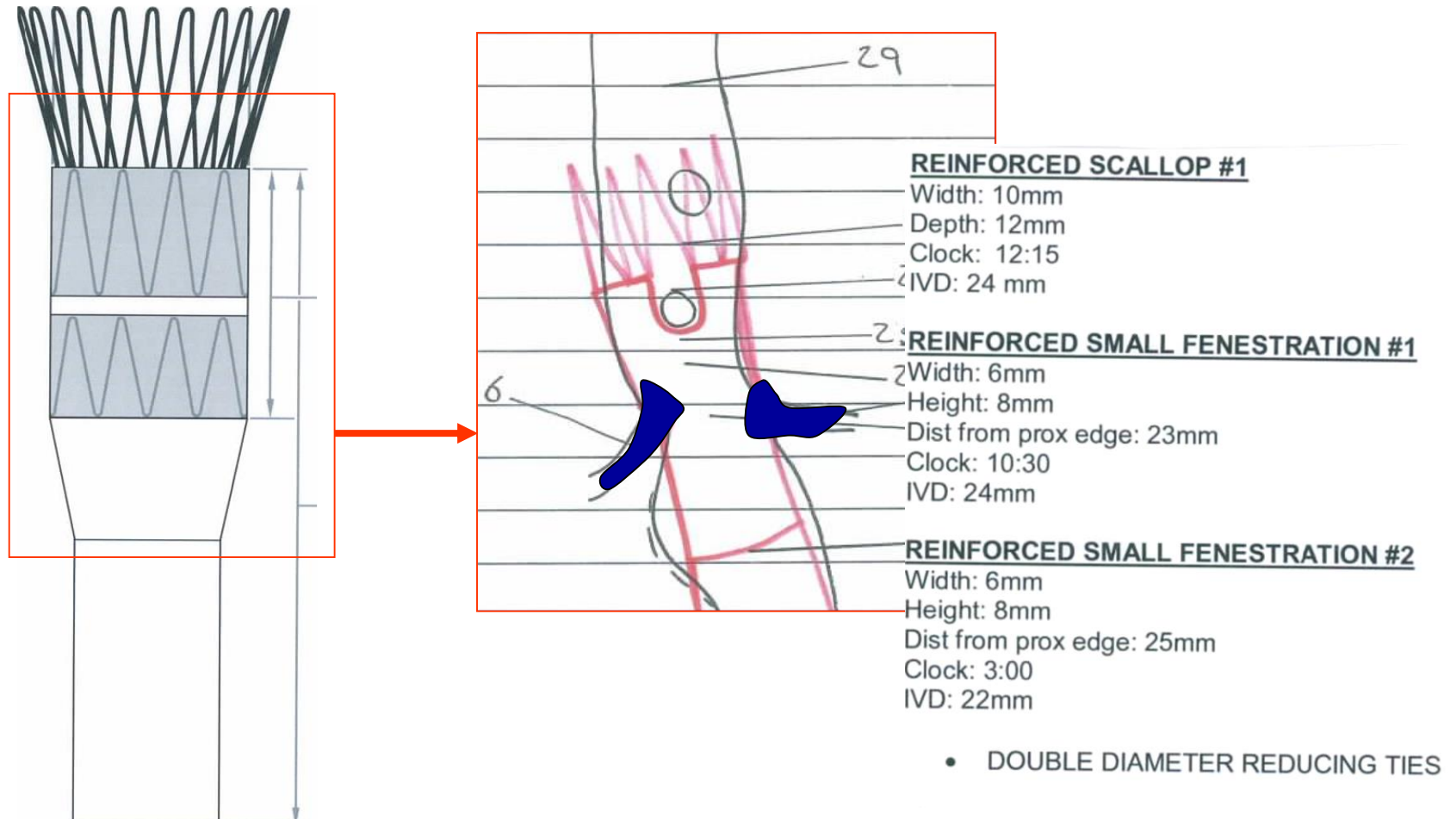




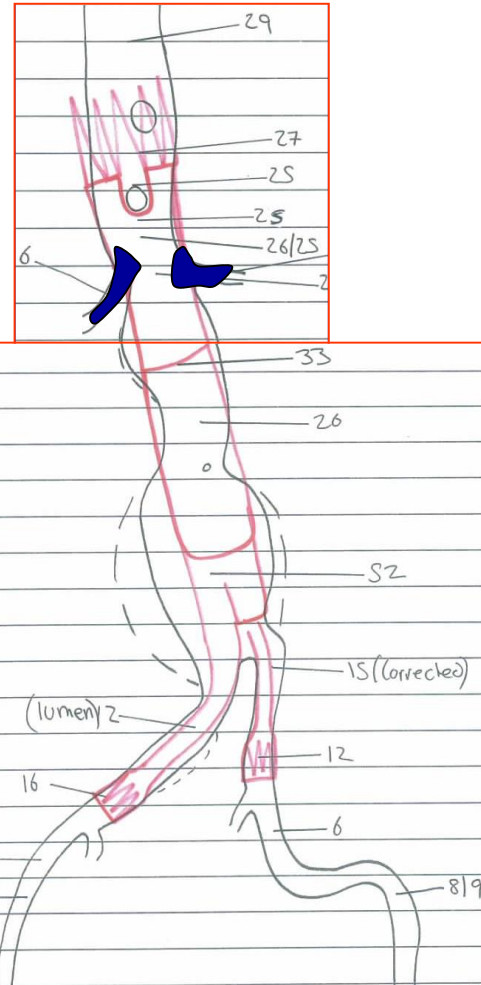
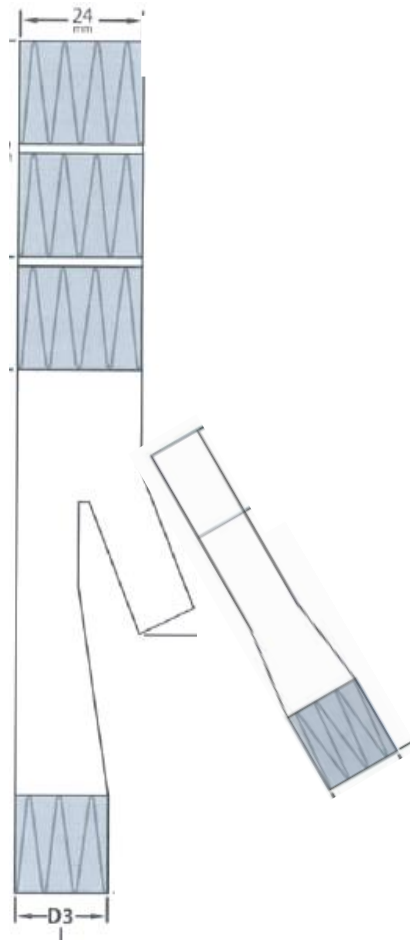
Fenestrated Endograft



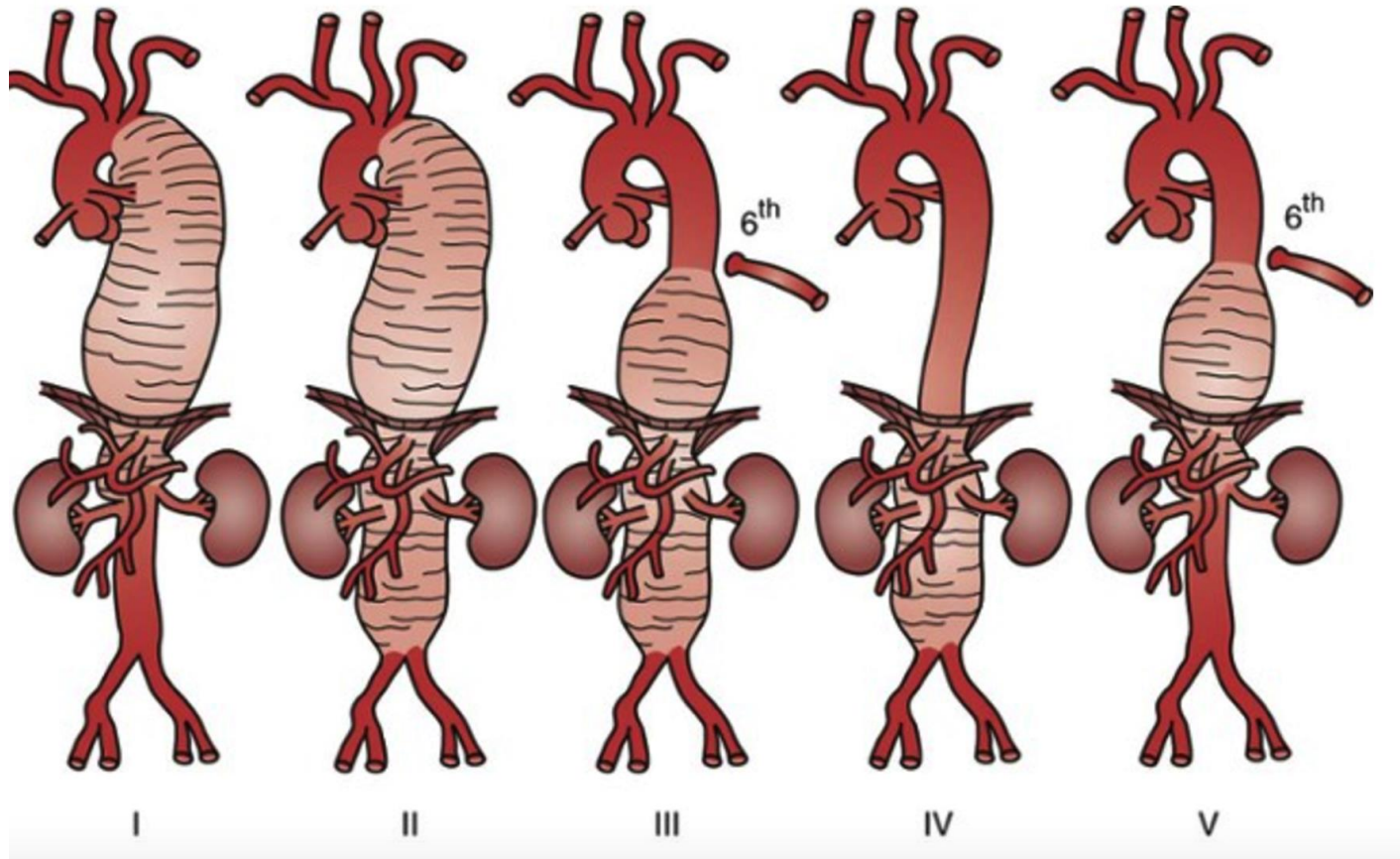
Fenestrated Endograft



Fenestrated Endograft

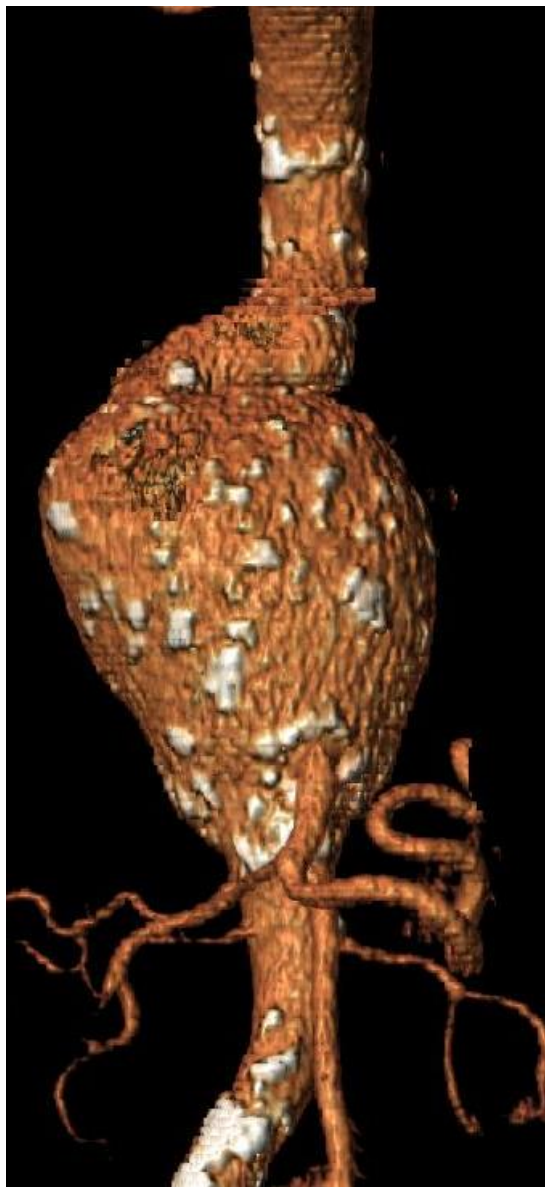


Trattamento Aneurismi Toracoaddominali

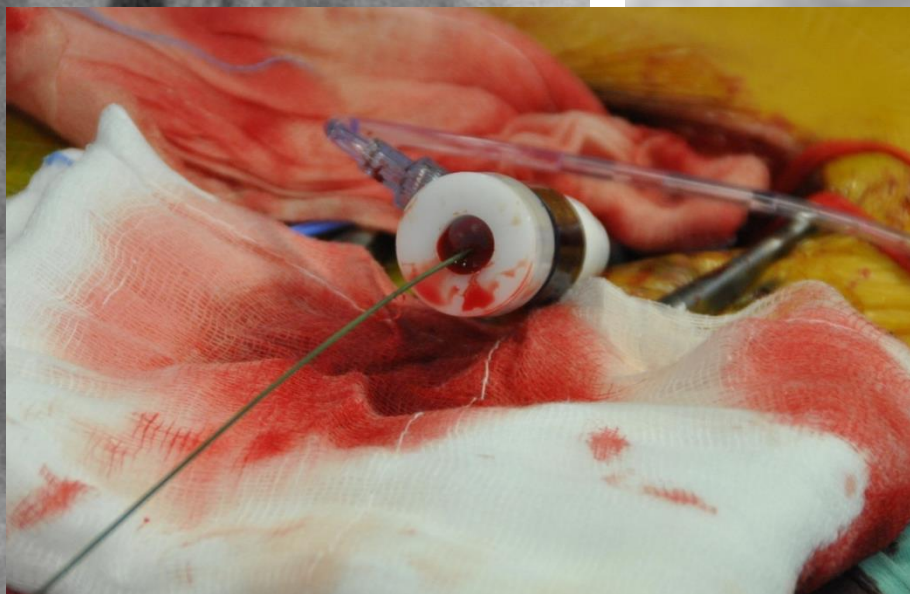
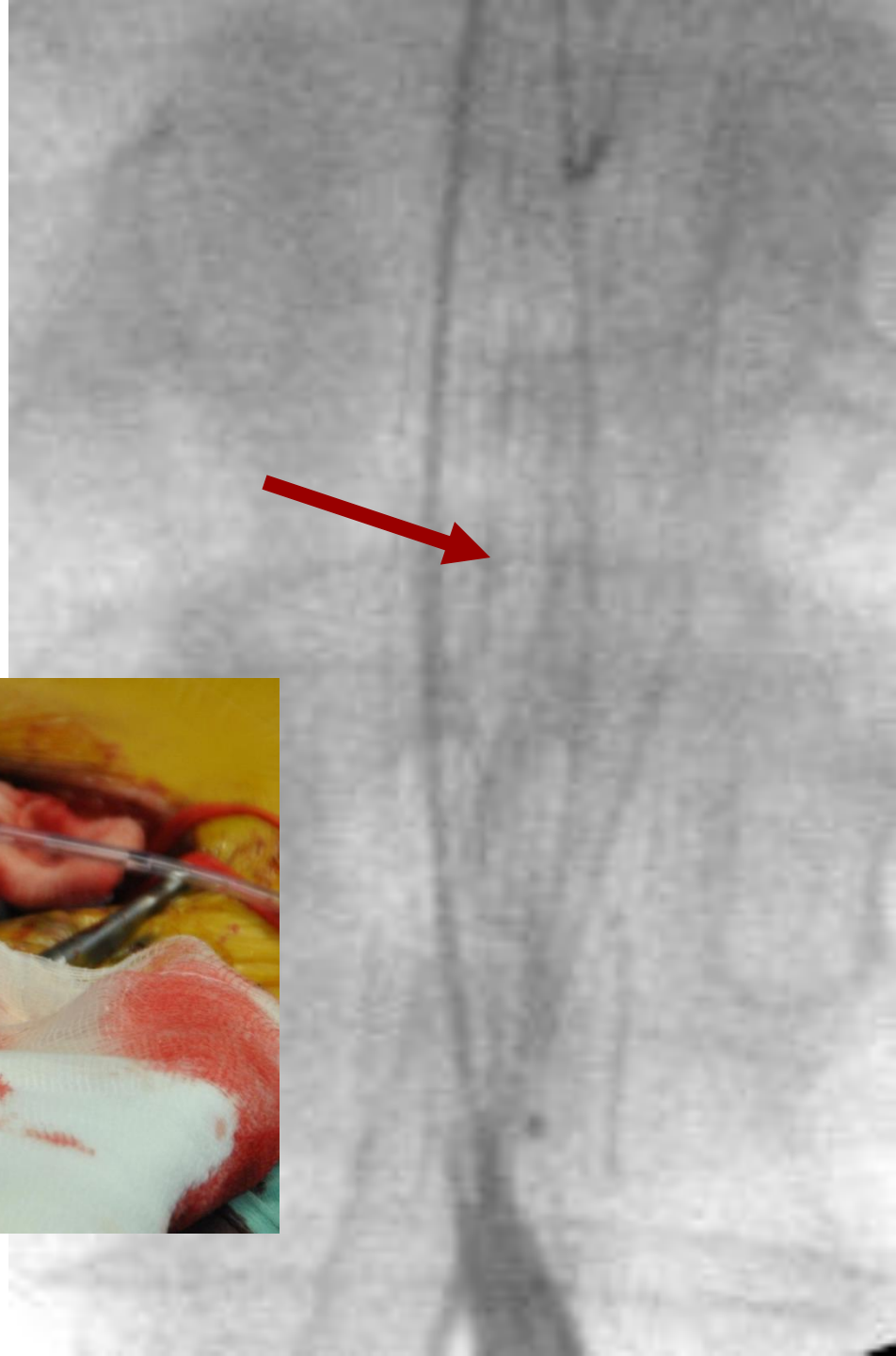
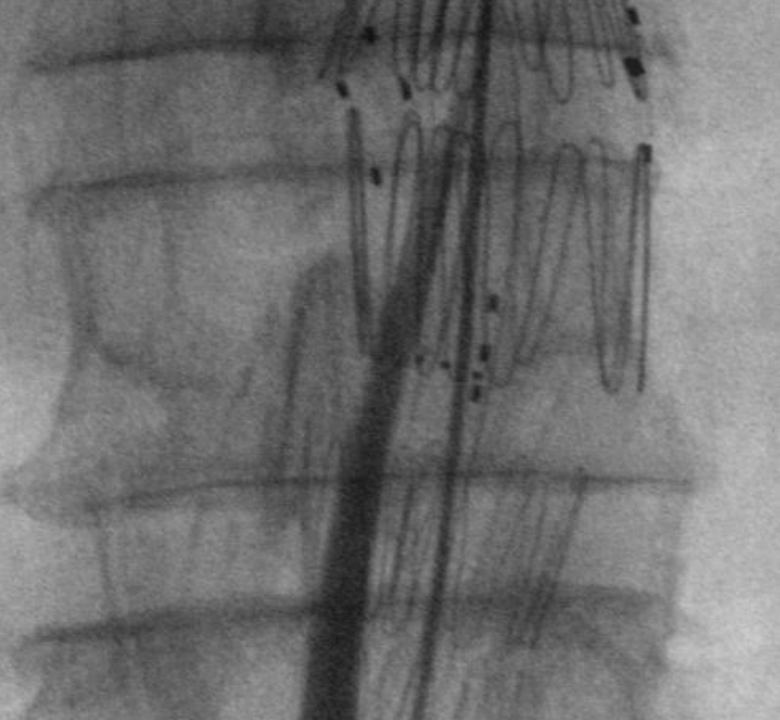


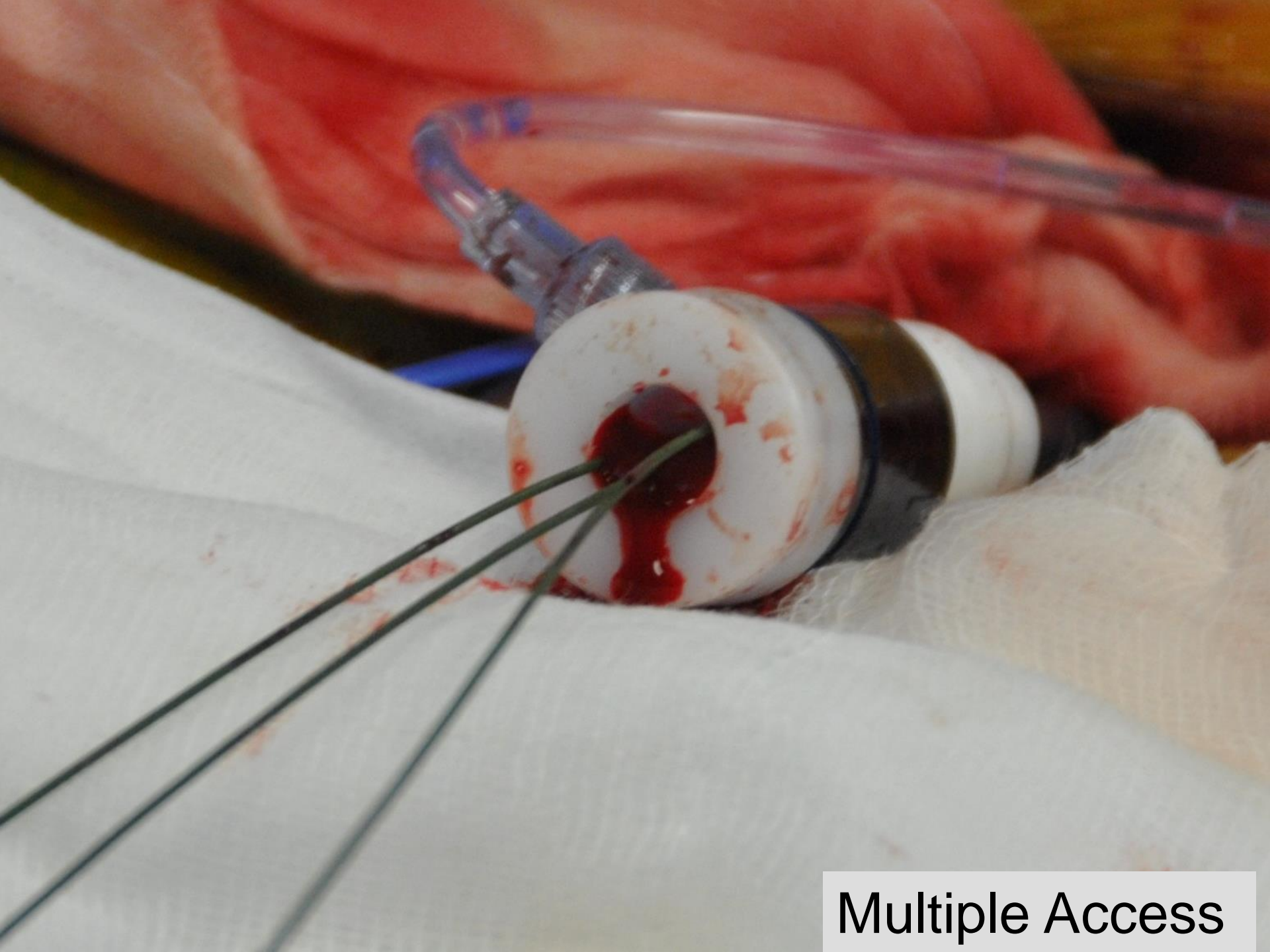
Cronenwett JL & Johnston KW, Rutherford's Vasc Surg 8th Edition, 2014



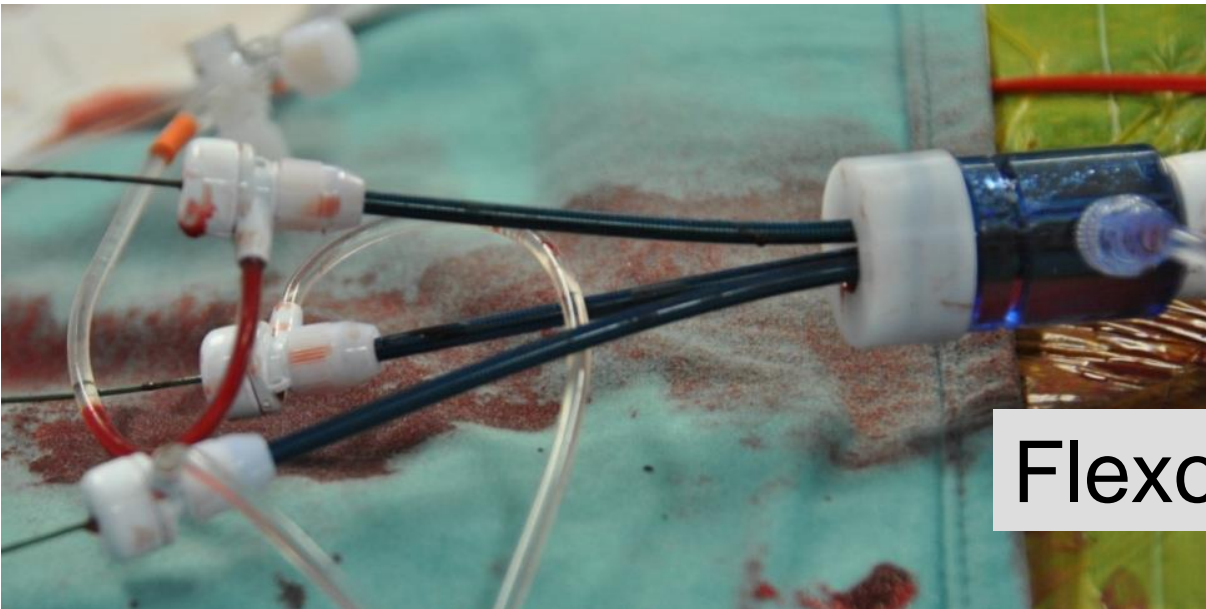
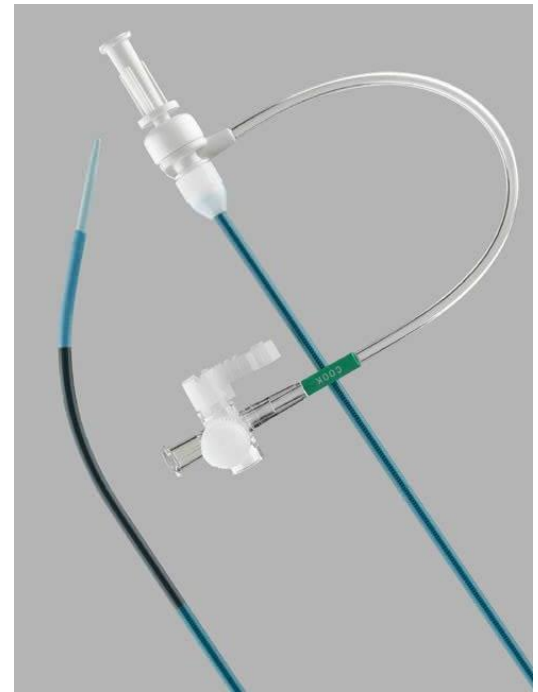
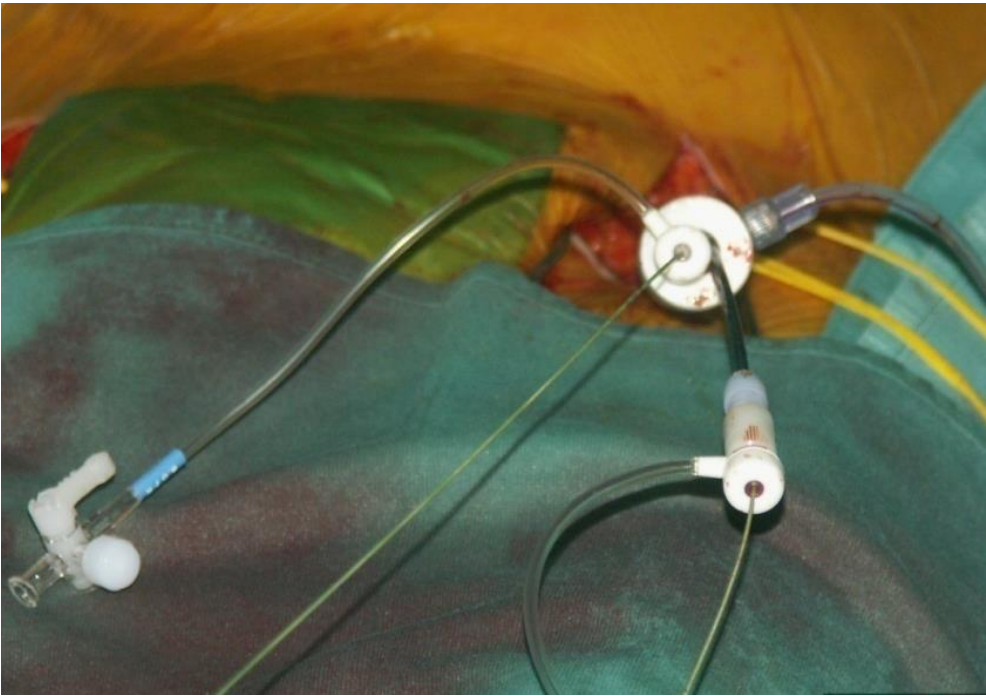




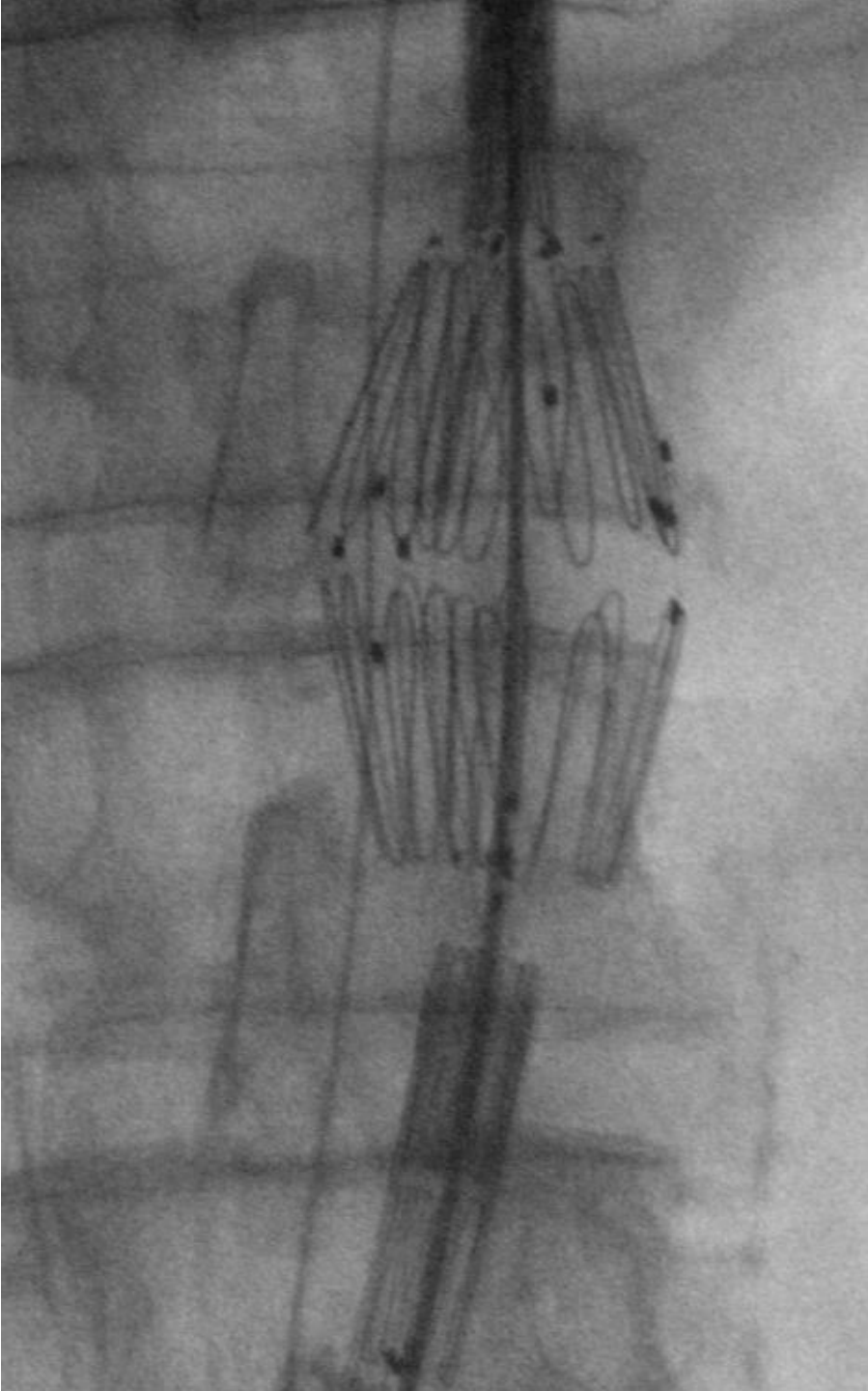




Multiple Access

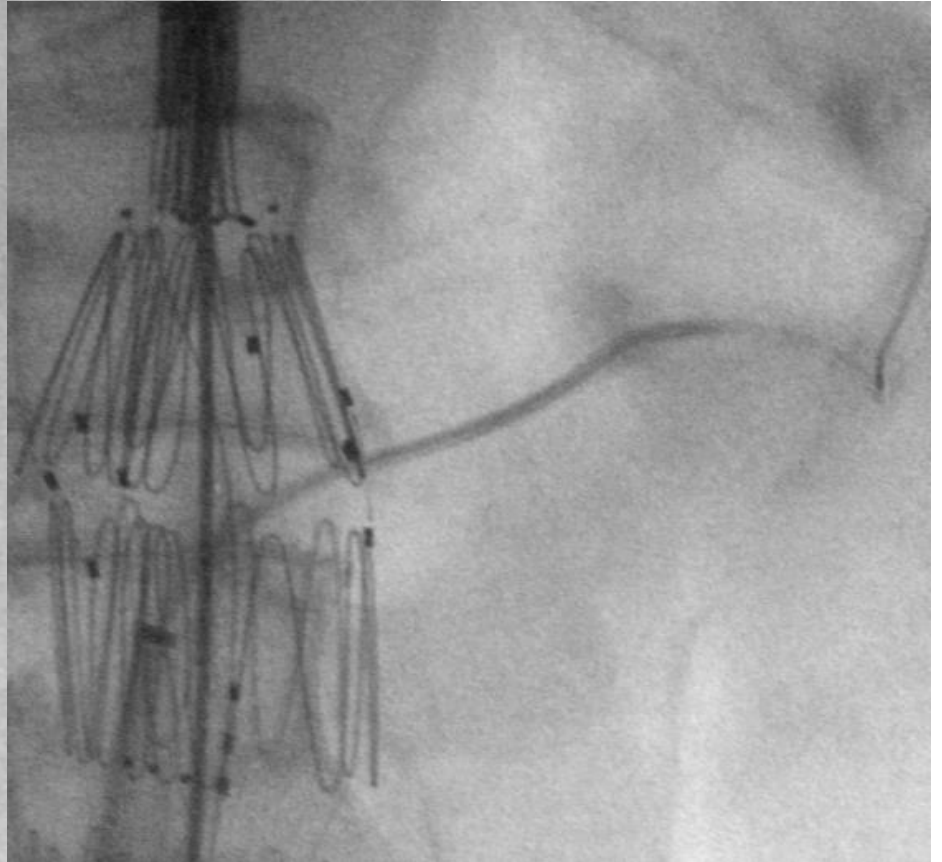


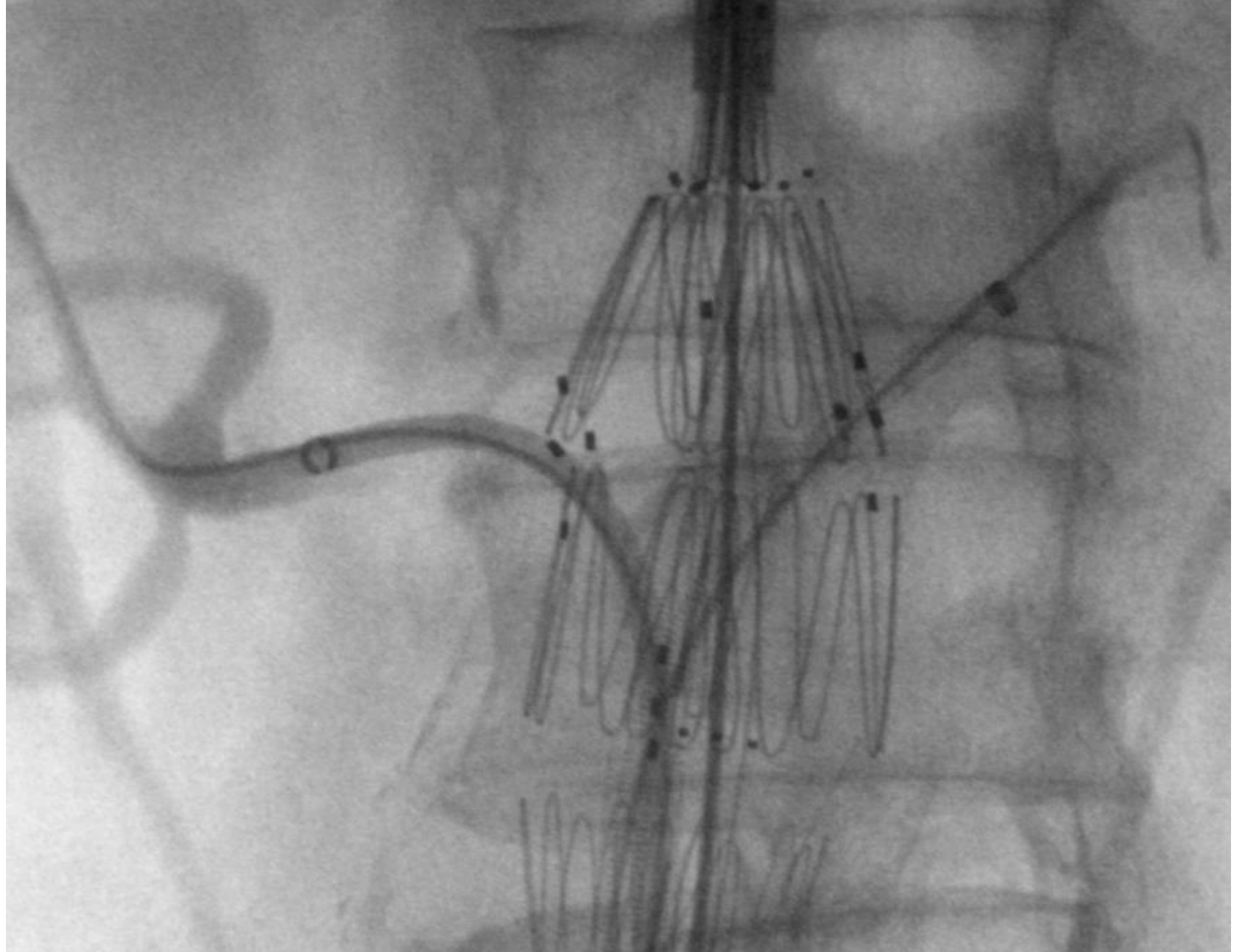
Flexor 7F, 55cm



0.035 Terumo Floppy

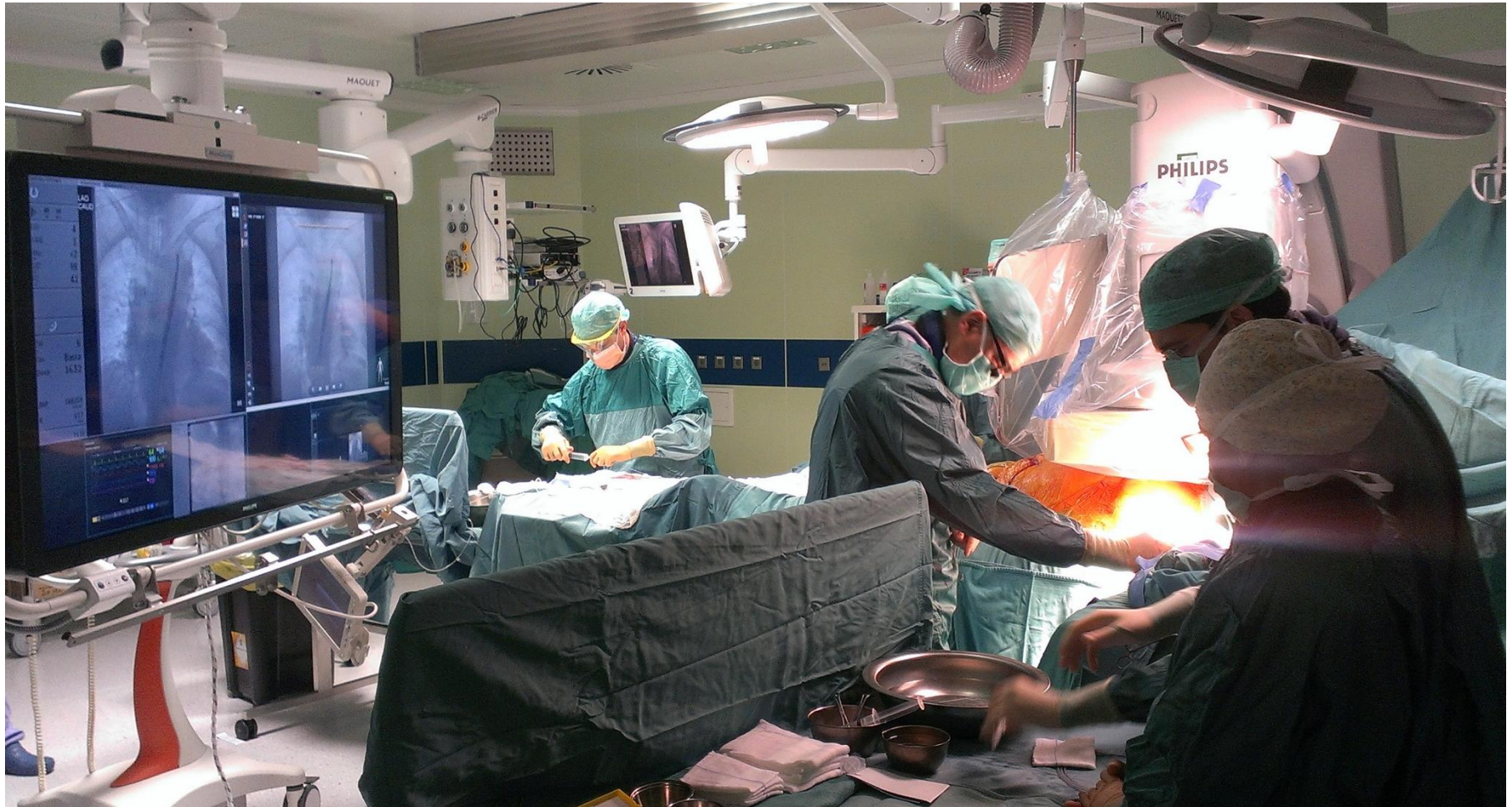
7F Cook
Flexor Introducer







Sala Ibrida

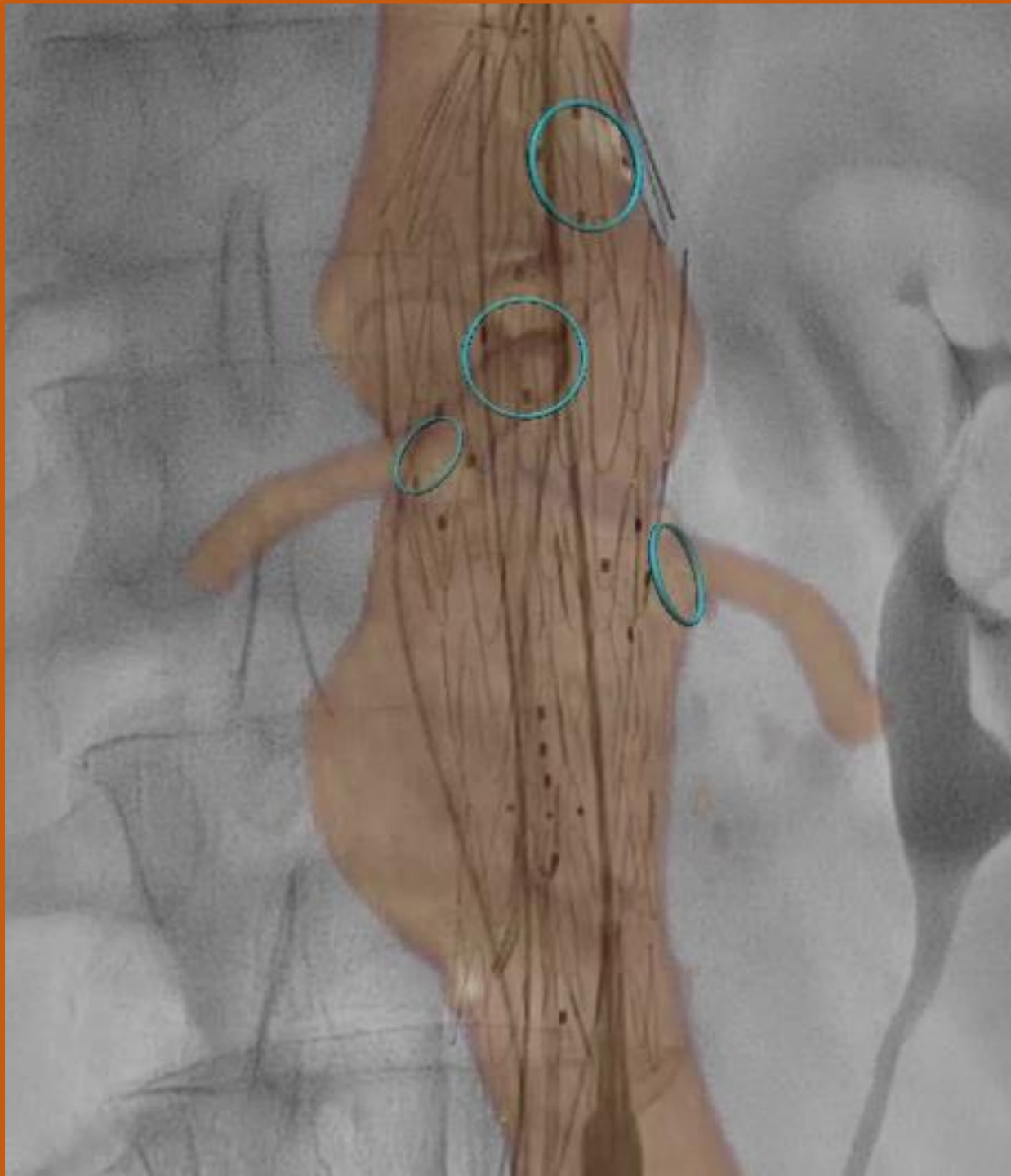




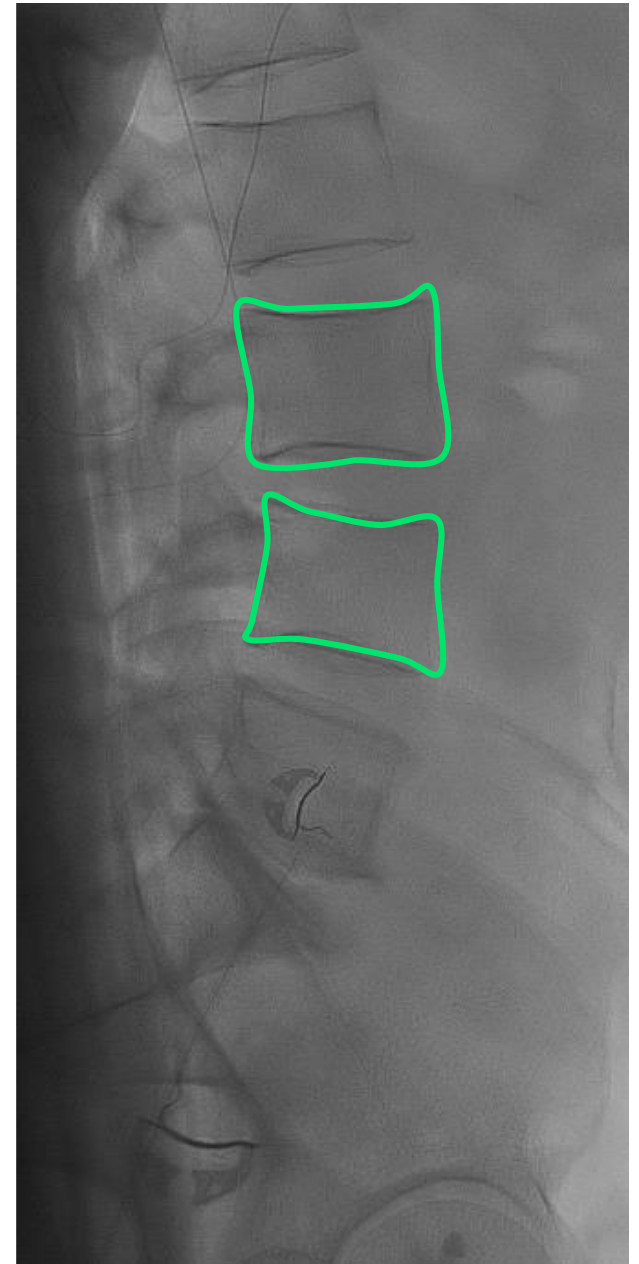
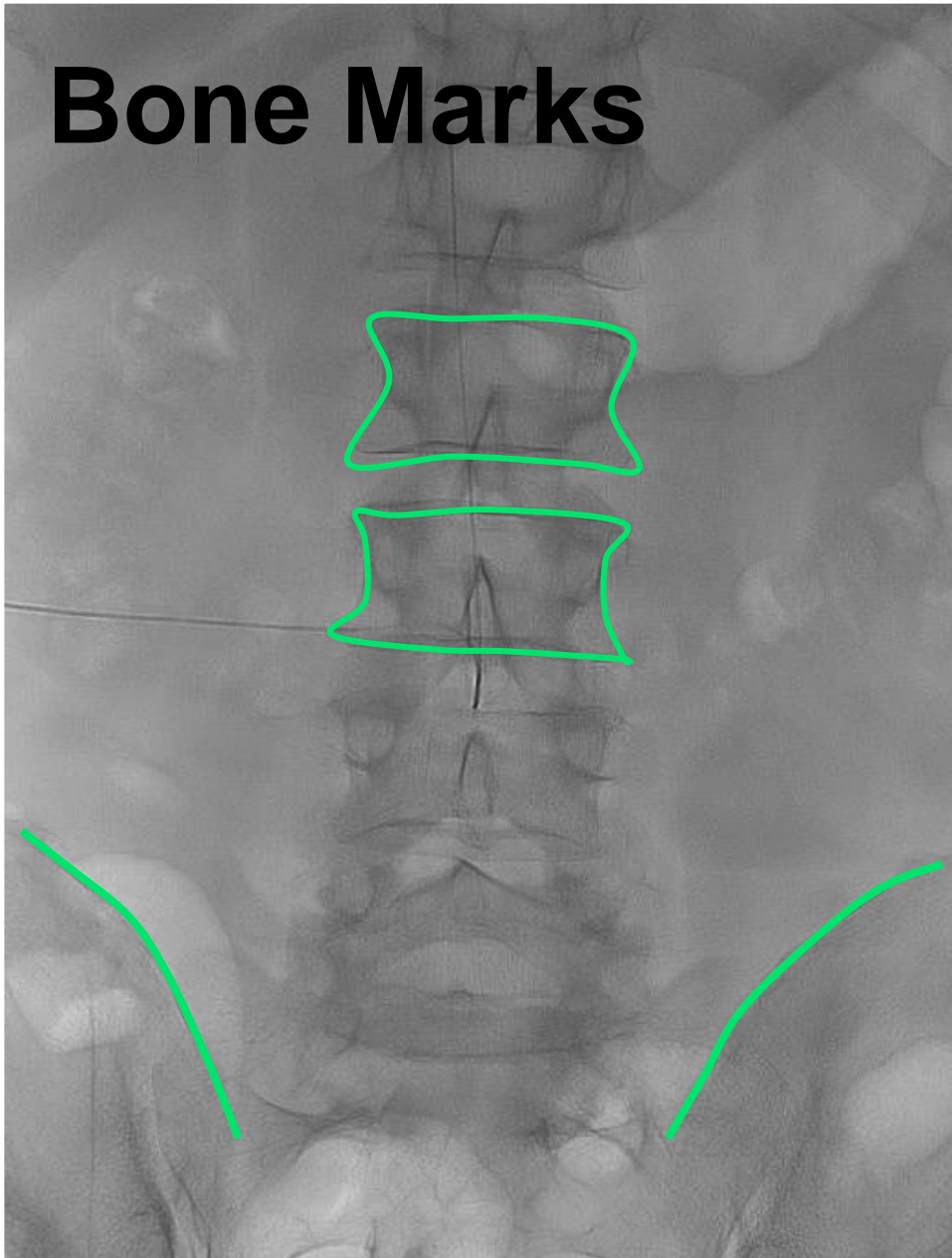
Visceral **V**essels **C**annulation

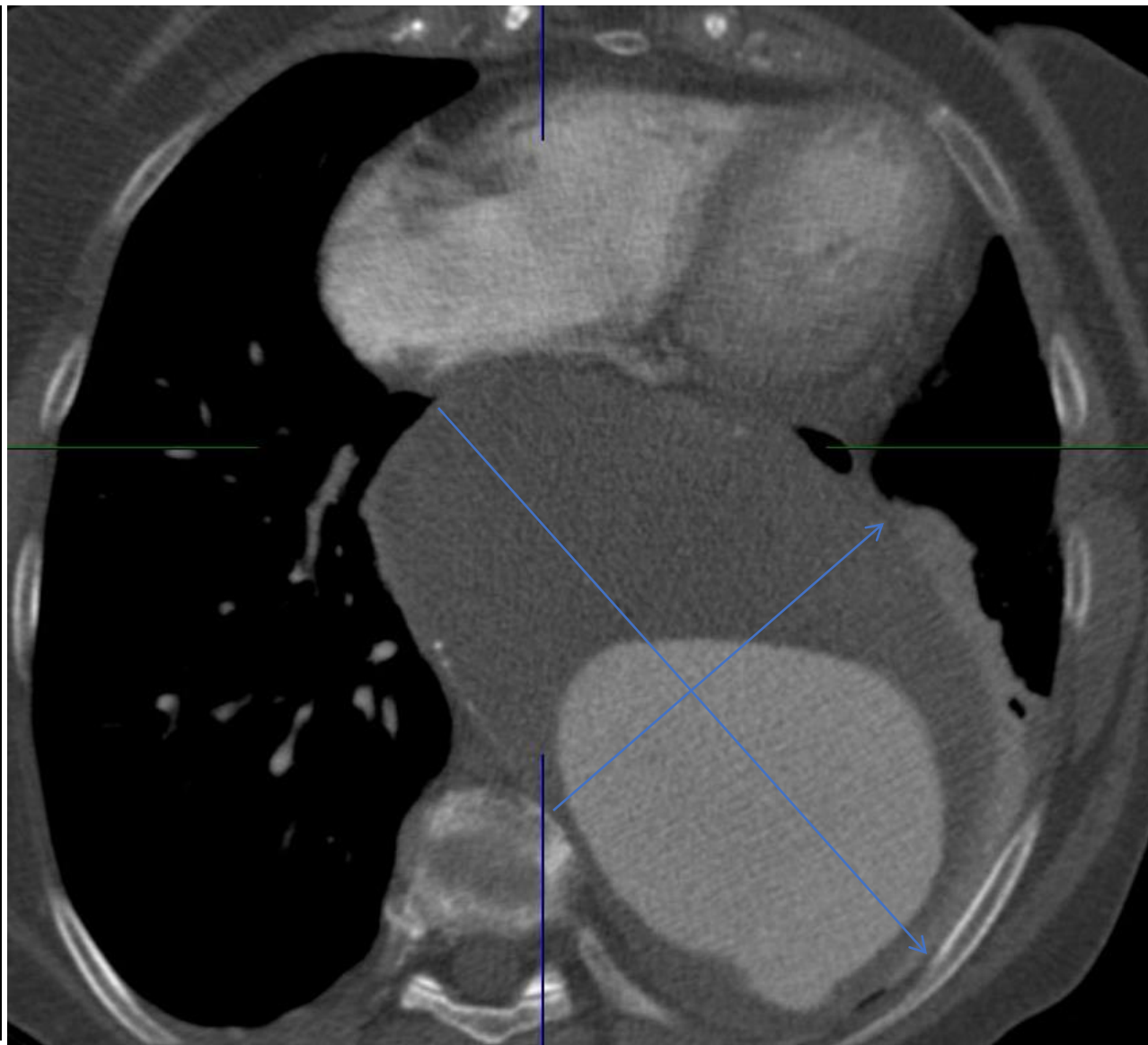


Vessel Navigator



Bone Marks





Ricostruzione volumetrica

Ricostruzione volumetrica



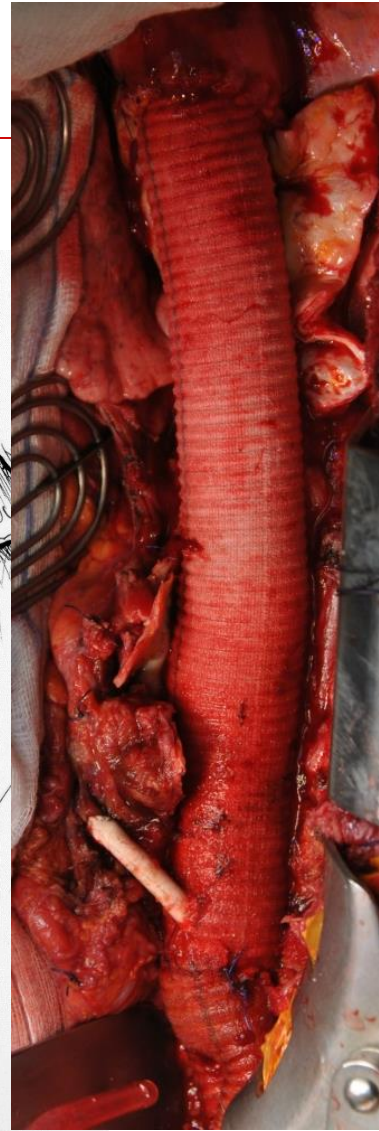
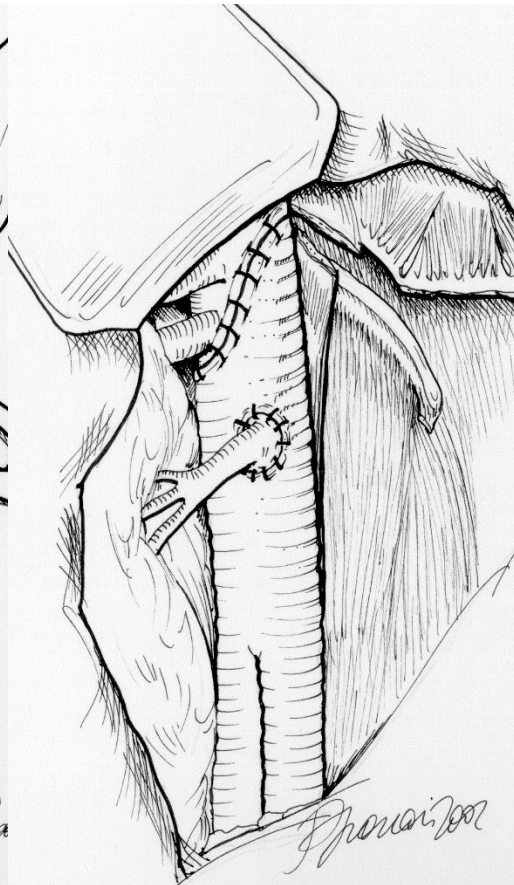
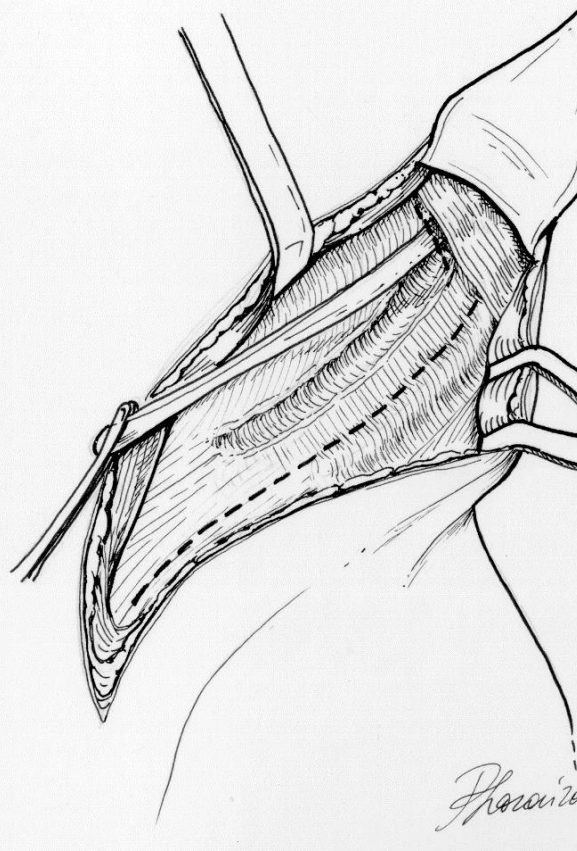
T-Branch



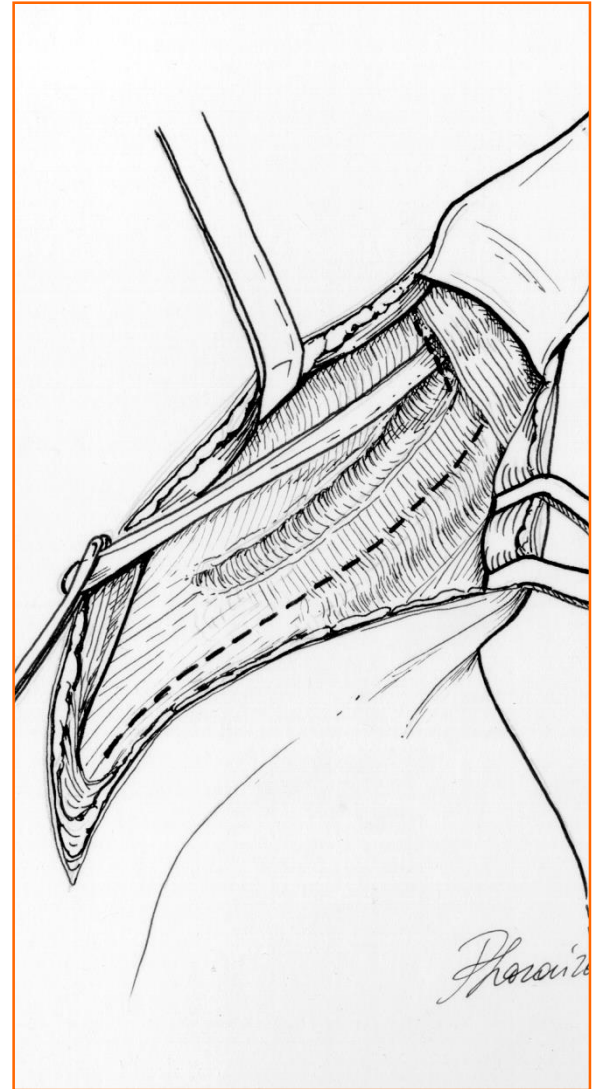
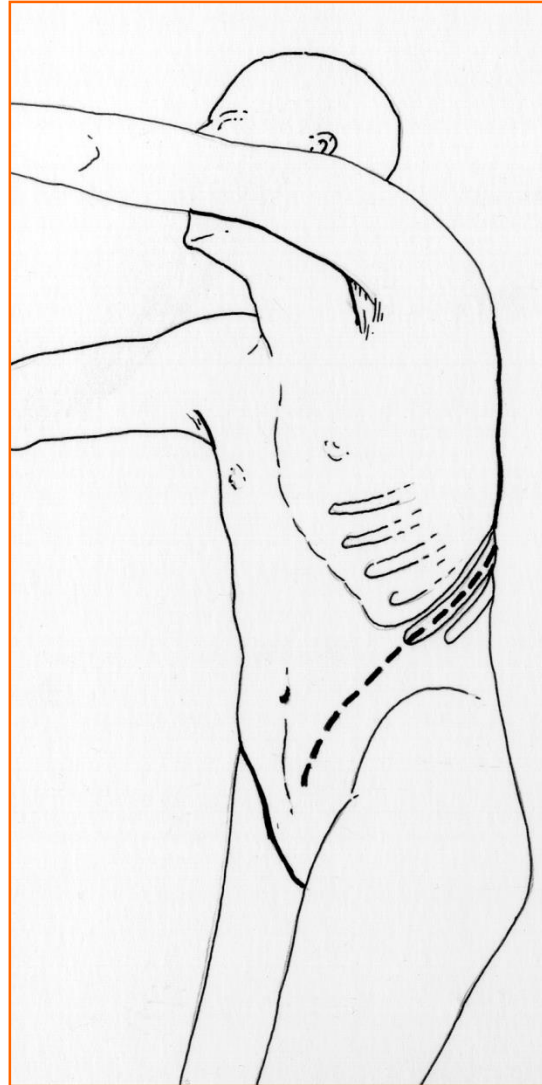
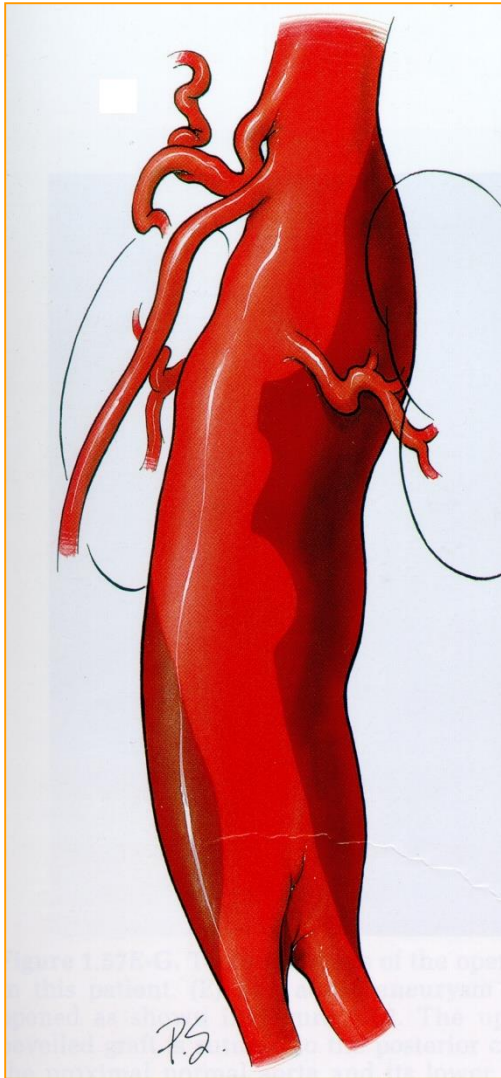
Thoracoabdominal Aneurysm



Trattamento Open



TAAA: Trattamento Open



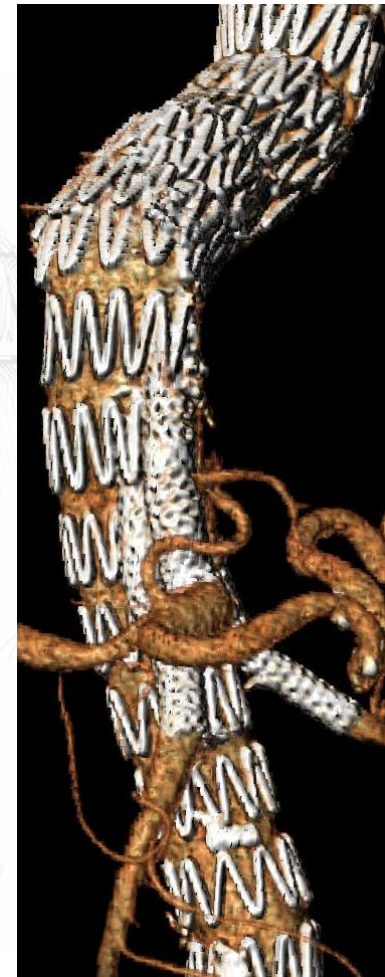
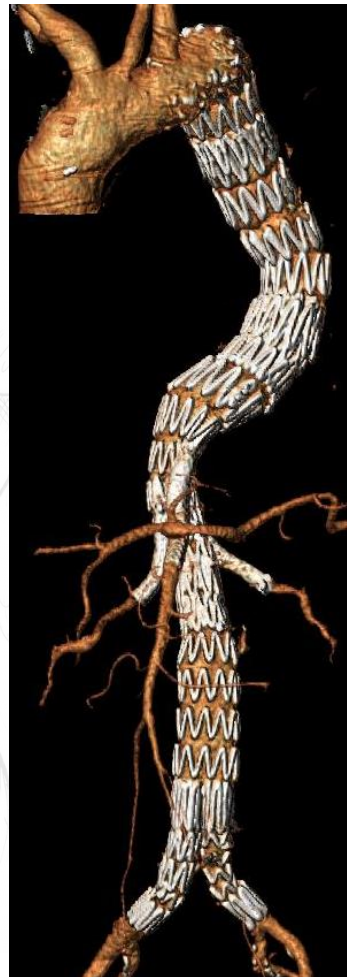
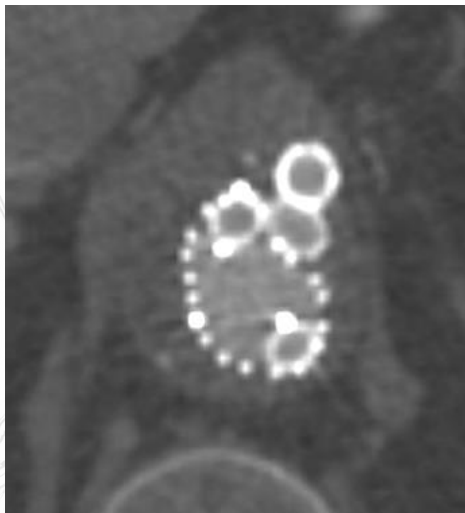
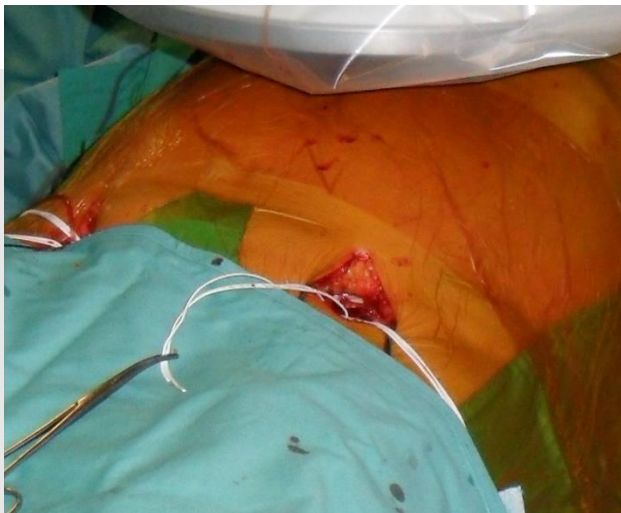
Outcomes of **3309** thoracoabdominal aortic aneurysm **open repairs**

JS Coselli, J Thorac Cardiovasc Surg. 2016

	%
Morte intraoperatoria	8
Ischemia midollare	5
Emodialisi	6
Complicanze cardiache	26
Complicanze polmonari	36



Trattamento Endovascolare





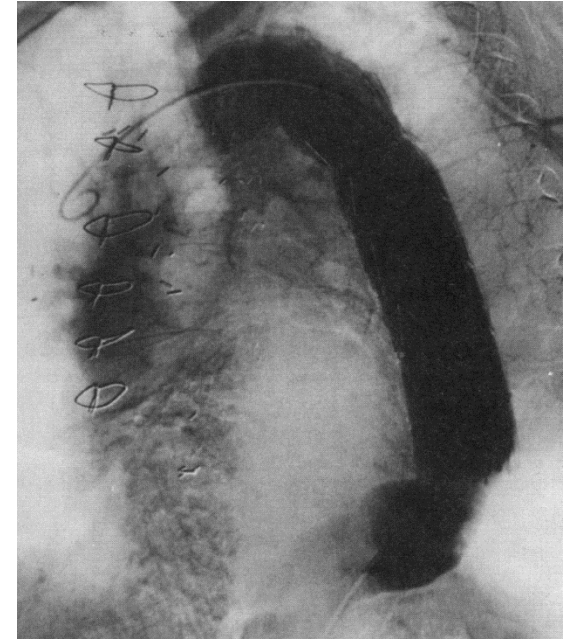
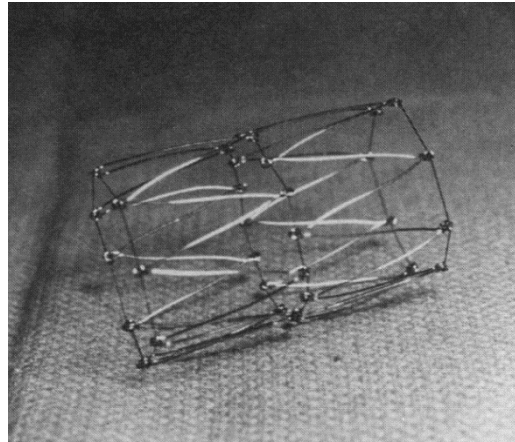
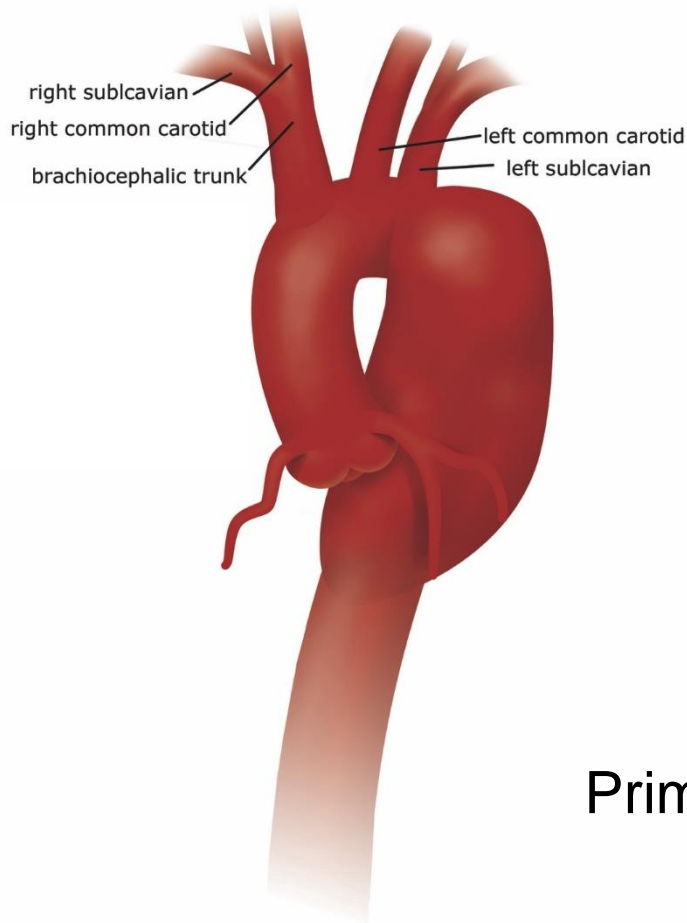
Endovascular Repair of **TAAA** using **fenestrated** and **branched** endograft

G Oderich, J Thorac Cardiovasular Surg 2017

185 casi	%
Mortalità a 30 giorni	4
Ischemia midollare	3
Emodialisi	1
Complicanze cardiache	5
Complicanze polmonari	5
Insufficienza renale	11



Aorta toracica: ricostruzione endovascolare



1994 – Michael Dake

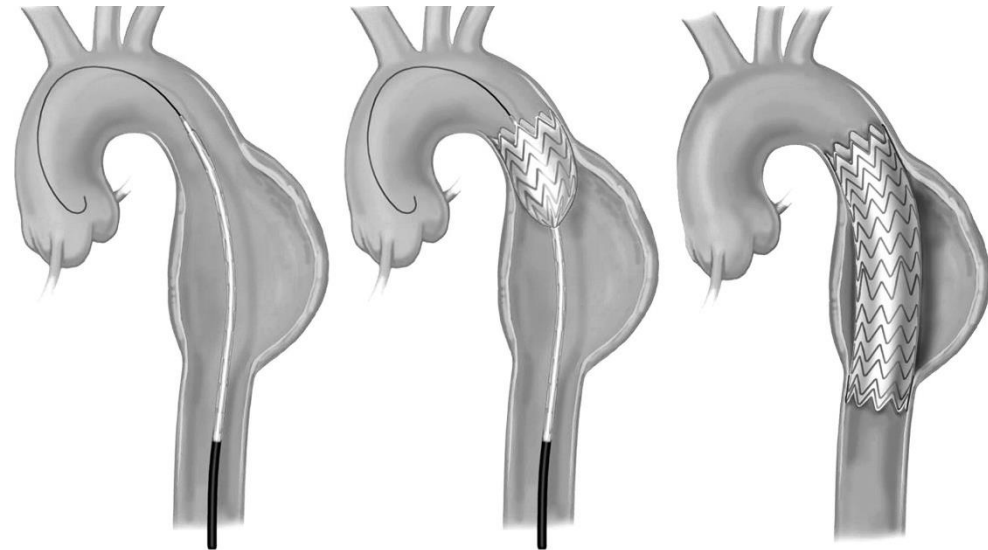
Primo trattamento endovascolare di aneurisma toracico discendente

Dake MD, NEJM 1994



TEVAR

Thoracic EndoVascular Aneurysm Repair



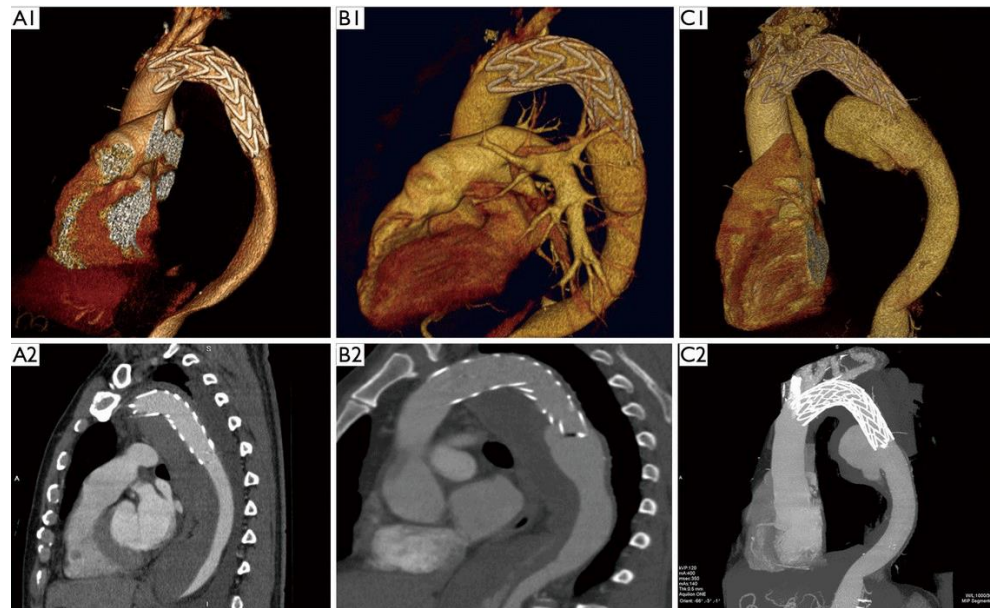
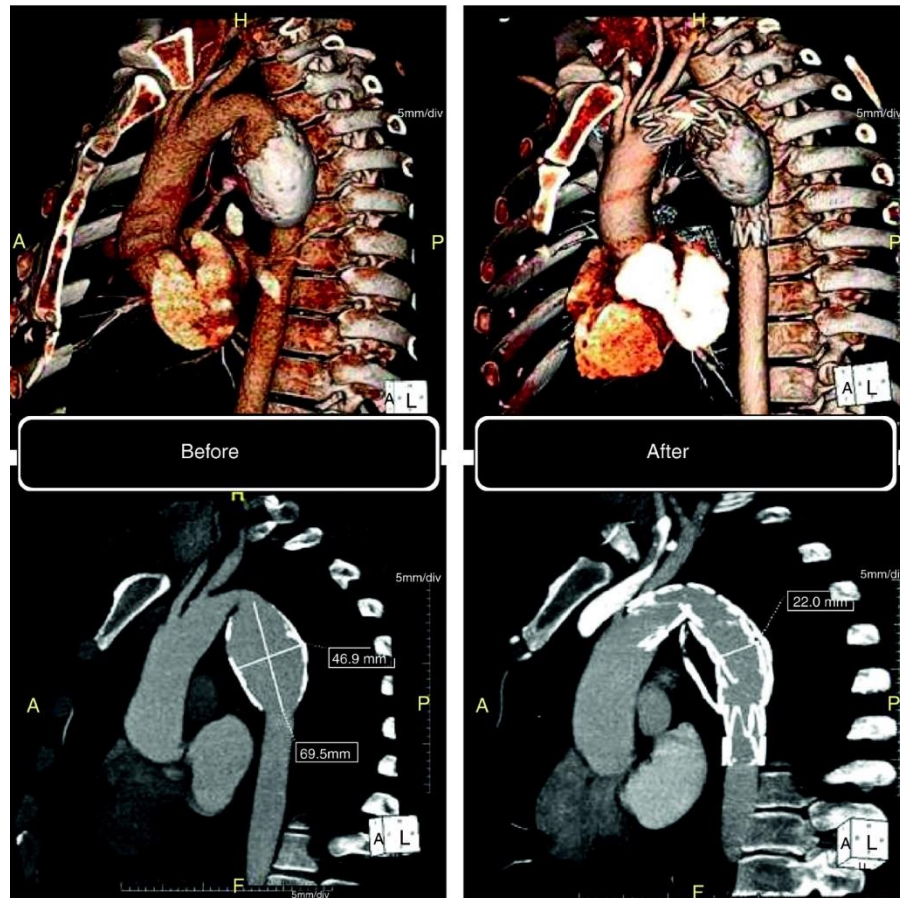
1994 – 2015

TEVAR è diventato il trattamento di scelta degli aneurismi dell'aorta toracica discendente



TEVAR

Thoracic EndoVascular Aneurysm Repair

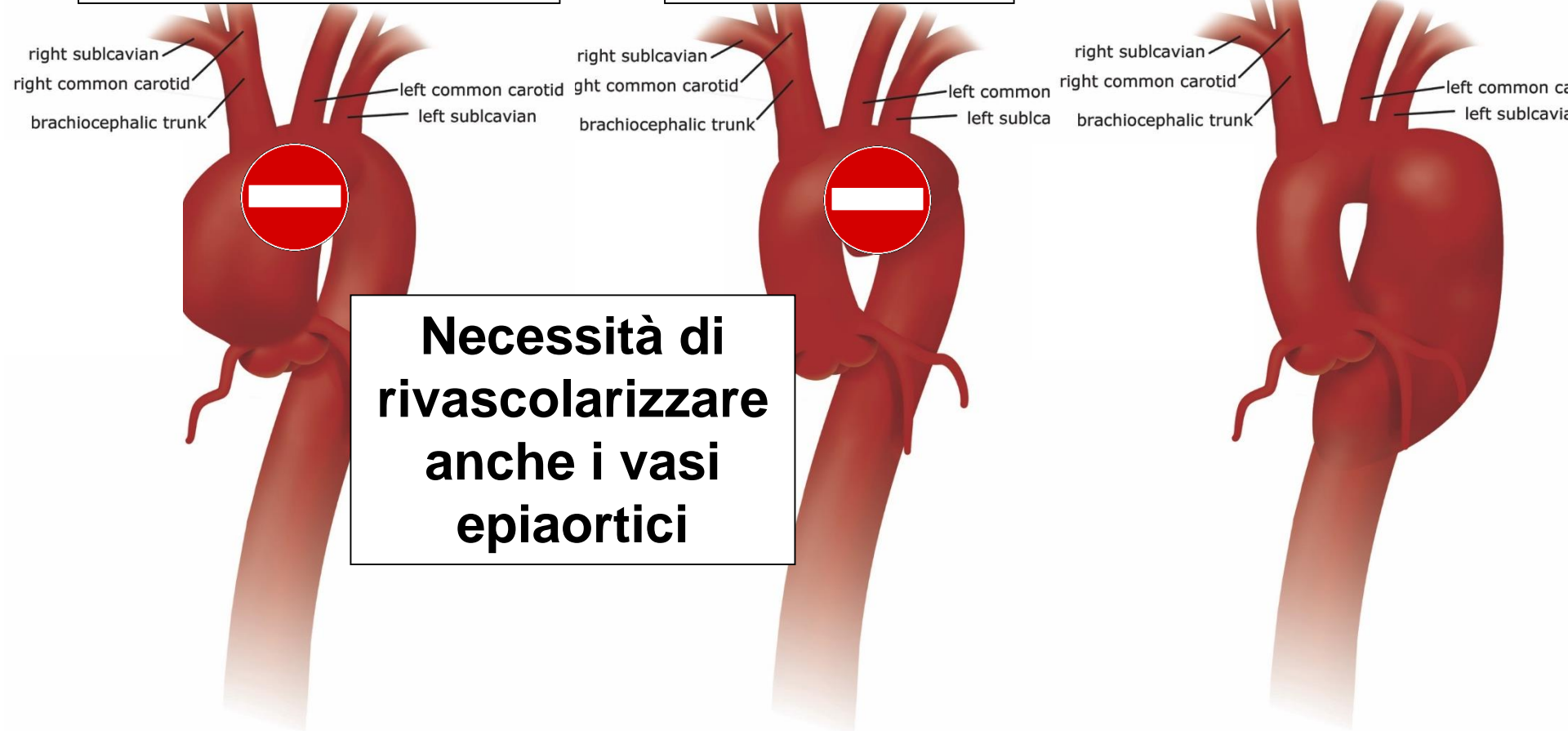


TEVAR per tutte le anatomie?

Aorta Ascendente

Arco Aortico

Aorta Discendente



**Necessità di
rivascolarizzare
anche i vasi
epiaortici**



TEVAR per tutte le anatomie?



Endoprotesi branched per l' arco aortico

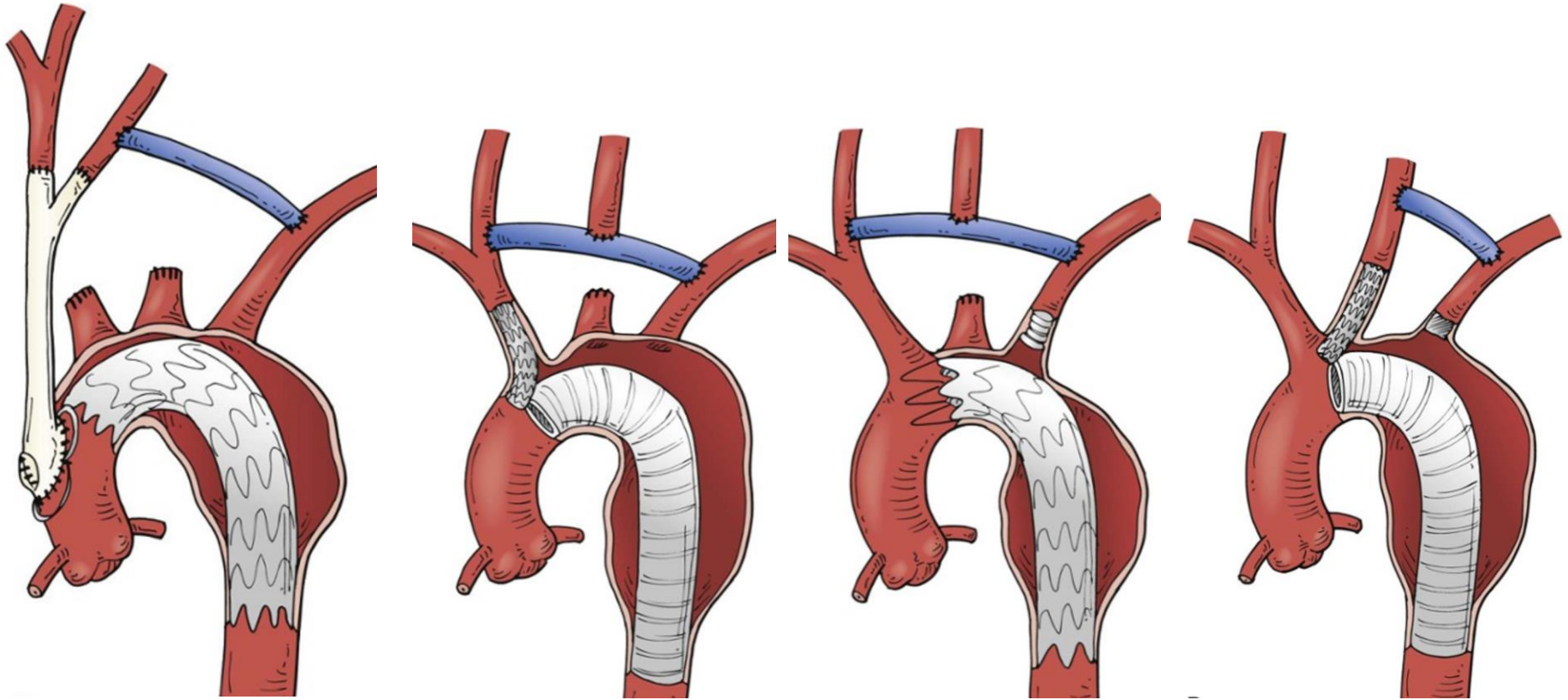
Global experience with an inner branched arch endograft



S Haulon, J Thorac Cardiovasc Surgery 2014



Debranching dei vasi epiaortici



Cronenwett JL & Johnston KW, Rutherford's Vasc Surg 8th Edition, 2014



Debranching dei vasi epiaortici

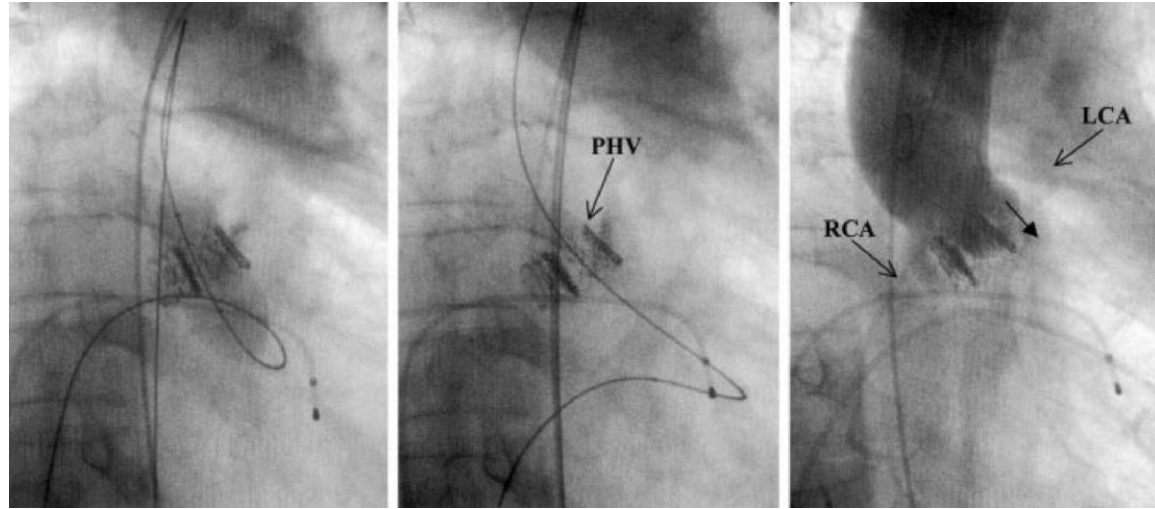
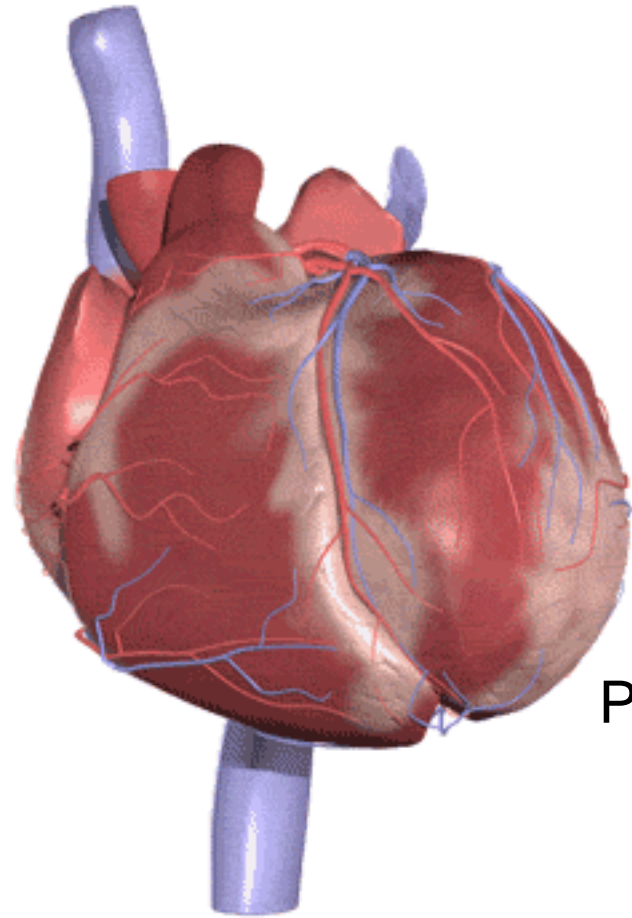
Aortic arch debranching and thoracic endovascular repair



P De Rango, J Vasc Surgery 2014



Valvola aortica: ricostruzione endovascolare



2002 – Alain Cribier

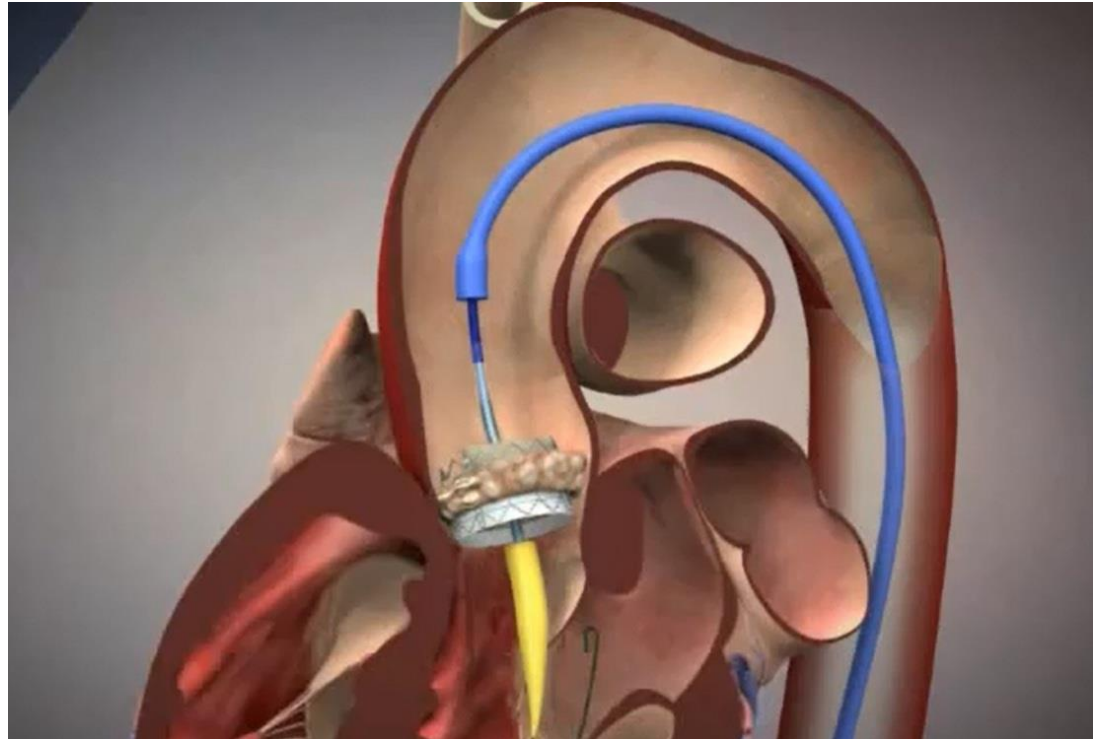
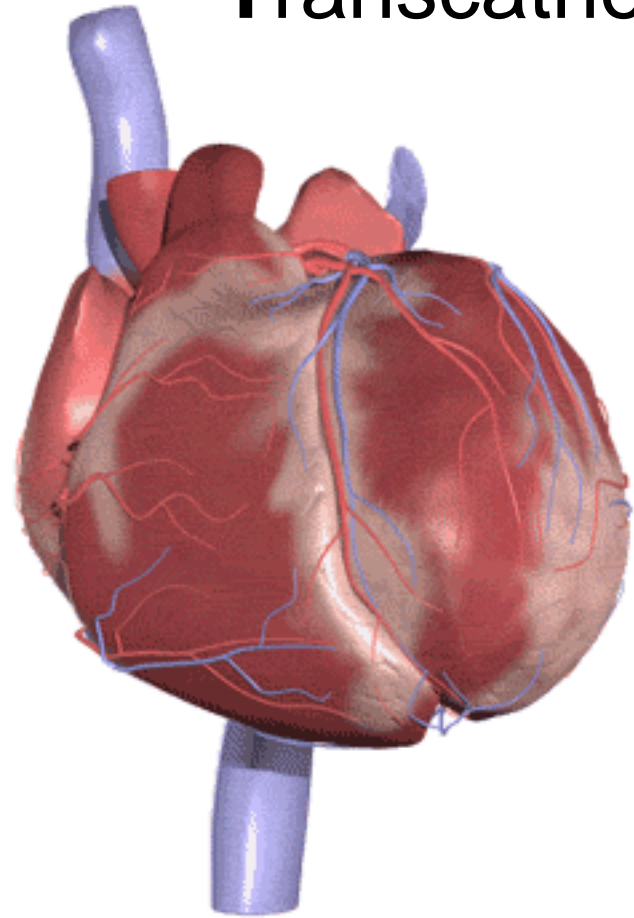
Primo impianto di valvola aortica transcateretere in paziente con stenosi valvolare aortica

Cribier A, Circulation 2002



TAVI

Transcatheter Aortic Valve Implantation



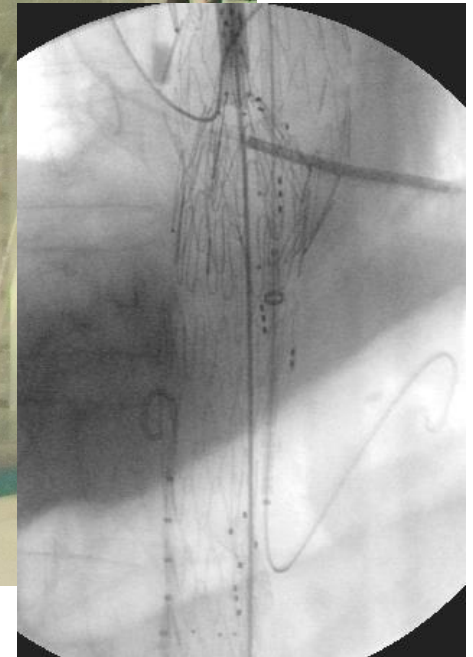
Cribier A, Circulation 2002



Simulazione

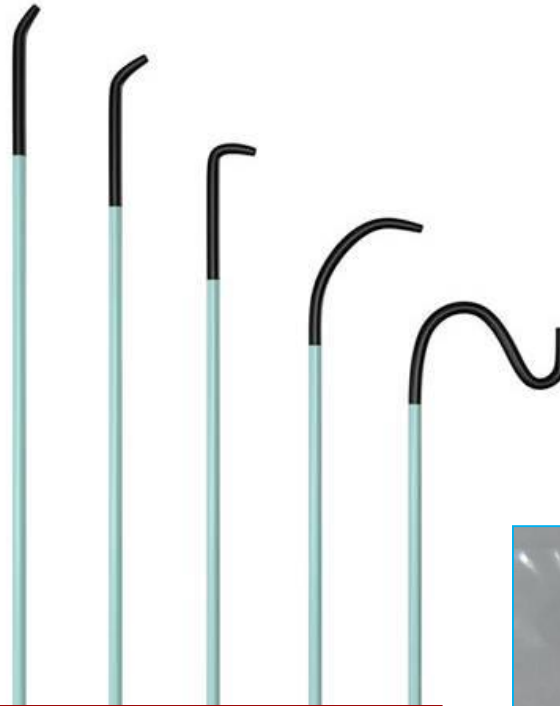
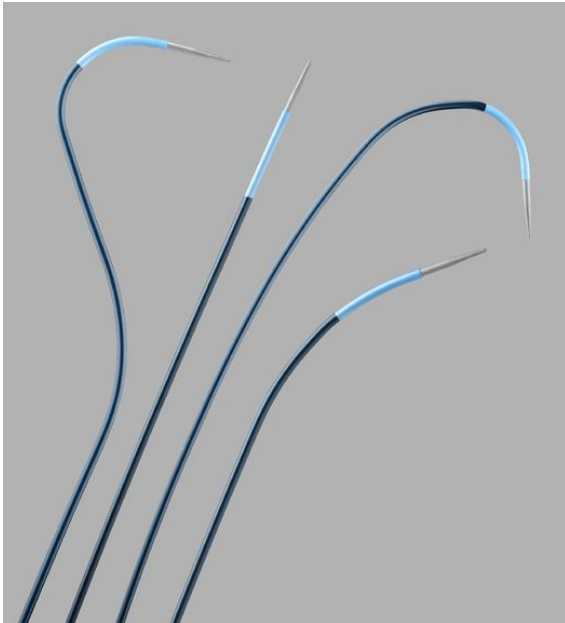










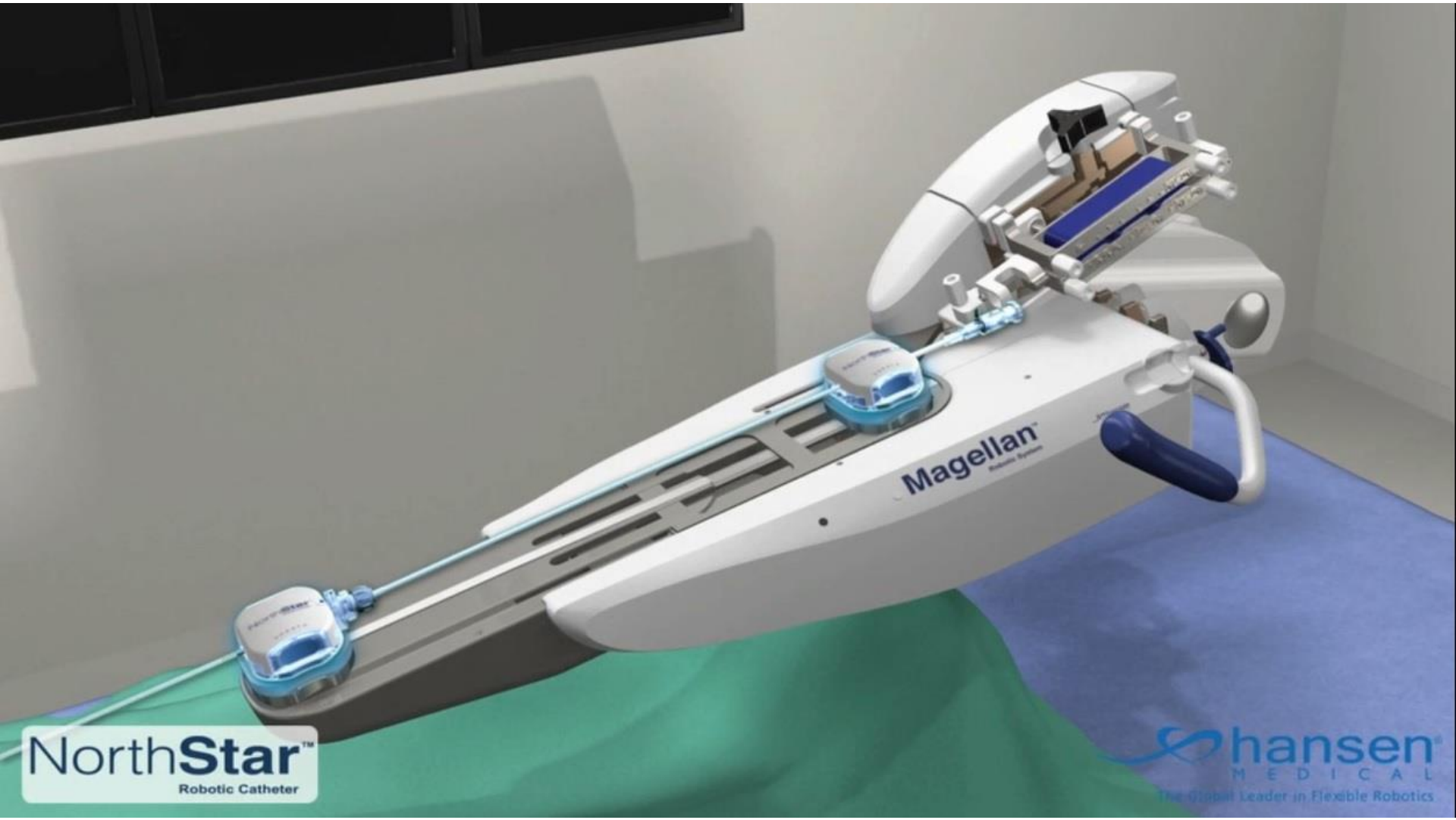


Guide, Cateteri, Introduuttori



Disponibilità Endoprotesi

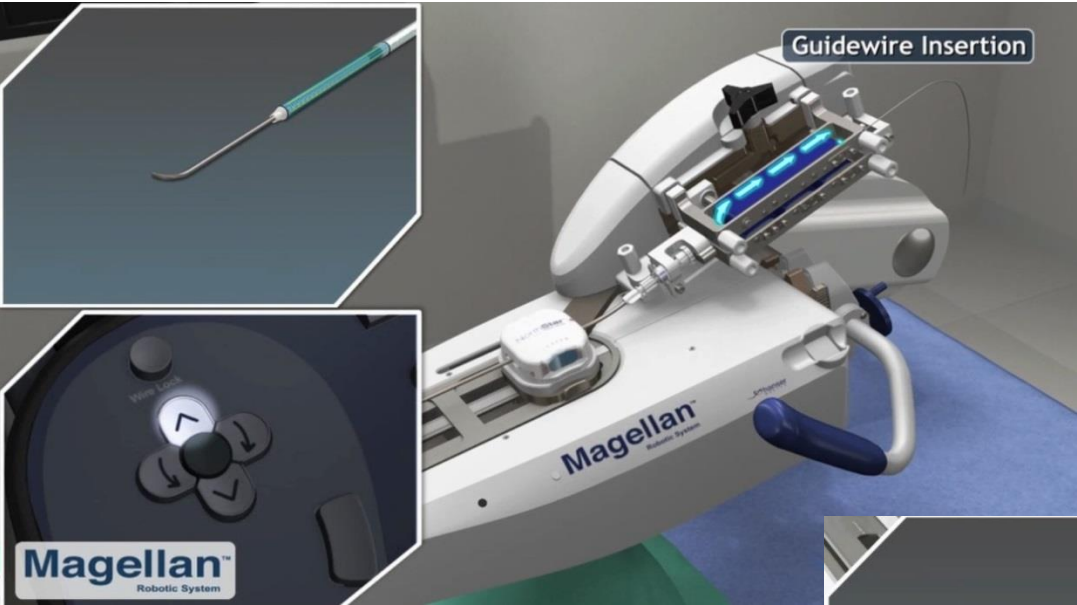




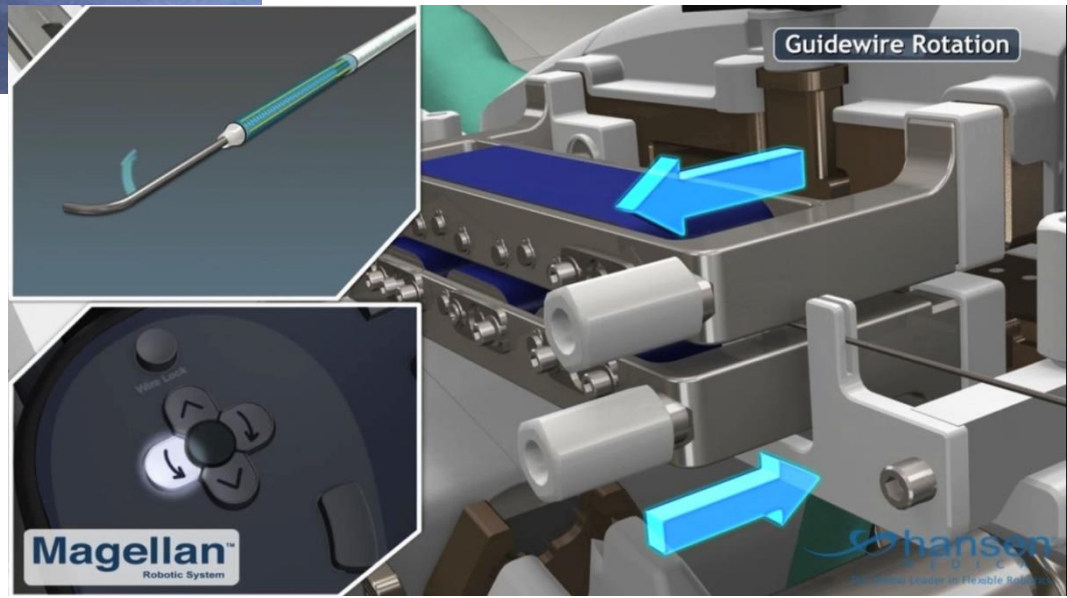
NorthStar[™]
Robotic Catheter

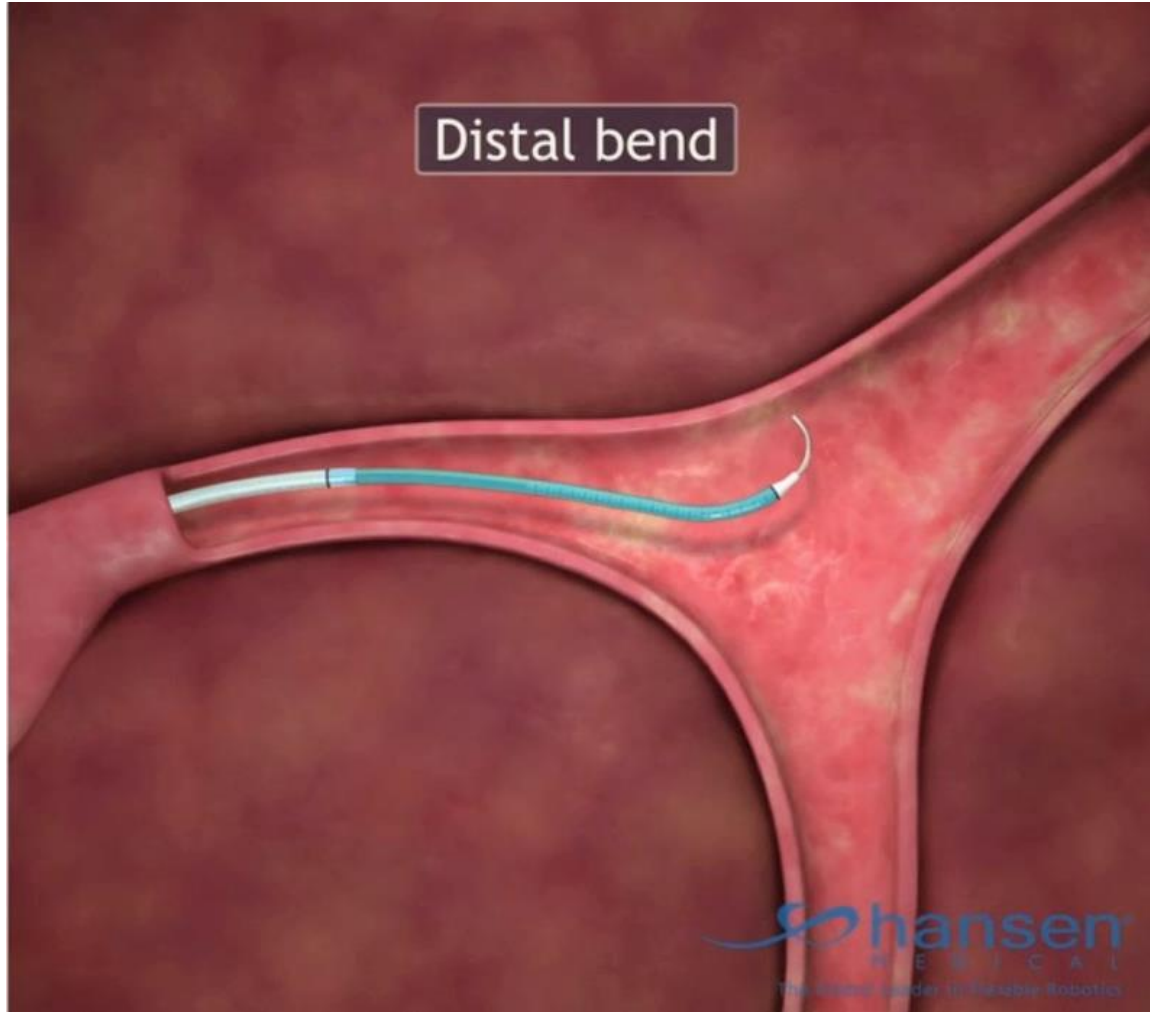
hansen[®]
MEDICAL
The Global Leader in Flexible Robotics.

Guidewire Insertion

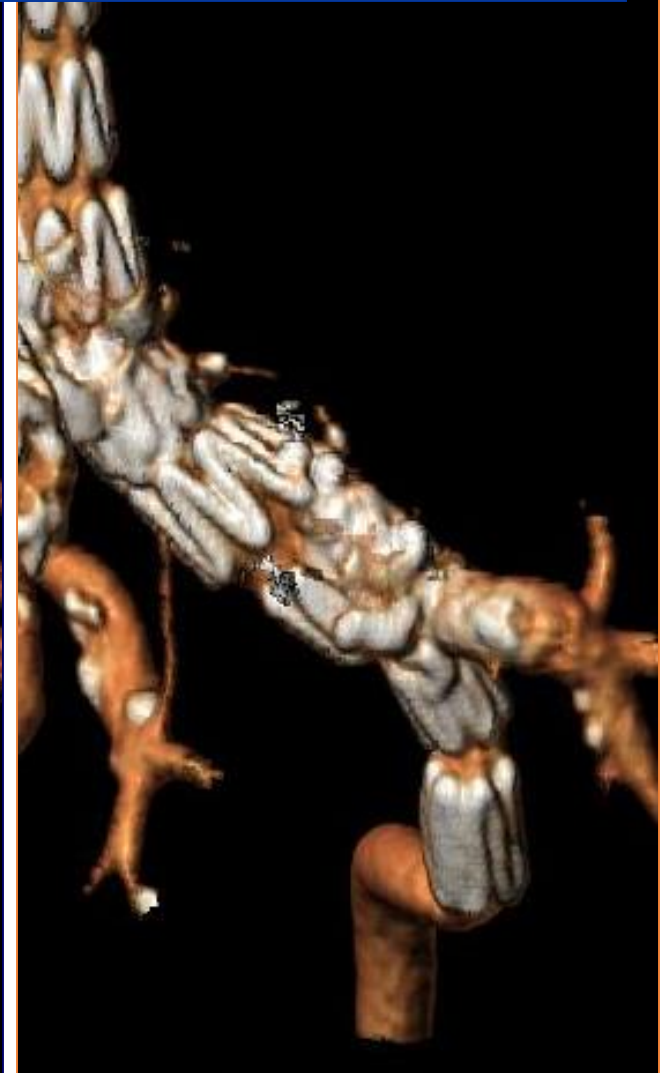


Guidewire Rotation





100% Aortic Endovascular Repair?







New York World-Telegram

The Sun

ALL Sports FINAL Bid and Asked Prices Complete Markets

VOL. 122—NO. 190 MONDAY, APRIL 18, 1955 FIVE CENTS

DR. EINSTEIN IS DEAD AT 76

Kindergarten Tots to Get Free Vaccine

City Adds \$4,000 To First Program

Some 64,000 kindergarten children will get free Salk vaccine shots this spring as a result of a sudden shift today in Board of Education policy.

In spite of the confused picture on supply, the city said it would now include kindergarten children in the top priority. This includes children from ages 3 to 5, free kindergarten to the fourth grade.

The previous list up and down included the first, second, third and fourth grade children had to be taken care of first. Kindergarten children were to be placed in a second priority.

Will Be Vaccine. The new policy was spelled out by Dr. Frank J. O'Brien, associate superintendent in charge of child welfare, and Dr. H. H. Goldberger, director of the city's health education.

"There will be enough vaccine for all children in the kindergarten to the fourth grade between now and the summer," said Dr. Goldberger. "It really makes no difference whether a child is vaccinated next Monday or next month, as long as he gets the

Baseball NATIONAL LEAGUE R. H. E.

Pirates	1	0	0	1	0	0	2	—	3	9
Giants	2	0	1	8	0	1	0	—	12	15

Sarknot, Grunwald, Face, Popper and Shepard; Liddie, Grison and Westman.

Cubs	1	0	0	0	0	0	0	—	1	6
Braves	0	0	0	0	0	0	2	—	2	6

Baker and Cash; Bush, Johnson and Crawford. JUDGERS at PHILADELPHIA, night. YANKS at BALTIMORE, night.

Results at Jamaica

(Charts and Other Race Results in Sports Section.)

FIRST	1—Hed Me (Woodhouse).....	4.20	2.80	2.20
	2—Ray Scott (Adkinson).....	5.70	3.50	2.50
	3—Main Spoker (Grossman).....	—	—	3.20
SECOND	1—Dark Belle (Hegley).....	6.40	3.60	3.00
	2—Grand Kerry (Percival).....	—	9.00	5.00
	3—Good Marrow (Nichols).....	—	—	3.00
	Daily double (7 and 1) paid \$11.36.	—	—	—
THIRD	1—Demi Heave (Westrop).....	11.50	7.50	3.00
	2—Penny (Valenzuela).....	—	7.10	3.70
	3—Canaris (Boland).....	—	—	2.40
FOURTH	1—Elicurus Jay (Mikonen).....	11.50	5.20	3.20
	2—Worry Manana (Adkinson).....	—	4.50	2.00
	3—Tending (Shoval).....	—	—	2.50
FIFTH	1—Odd Trick (Boland).....	9.00	5.10	3.20
	2—Mr. Paul (Grossman).....	—	15.70	6.50
	3—Blackway (Valenzuela).....	—	—	2.50
SIXTH	1—Singer (LeBlanc).....	63.50	26.40	13.10
	2—J. Sauter (Adkinson).....	—	6.50	5.40
	3—Canadiana (Westrop).....	—	—	6.20
SEVENTH	1—Brown Bear (Shoval).....	6.60	4.30	3.20
	2—Roy Clay (Lester).....	—	10.10	6.20
	3—Cringer (Woodhouse).....	—	—	3.20
EIGHTH	1—Dan Giddings (Cargamie).....	16.40	6.70	4.00
	2—Shel Dark (Boland).....	—	3.50	4.00
	3—Lotta Eater (Mikonen).....	—	—	4.00

Giants Crush Pirates

Reds Blasted As Bandung Talks Begin

Free Vietnam, Iraq Open Fire

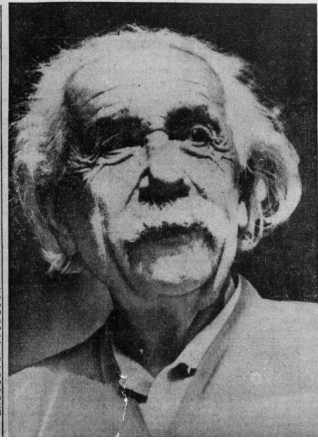
By GENE SYMONS, United Press Staff Writer. BANDUNG, Indonesia, April 18.—Iraq and Free Viet Nam strongly condemned communism today in the opening session of the

29-nation Asian-African conference.

Red China's Premier Chou En-lai, one of the most prominent delegates, lambled through it all.

The attacks on communism were virtually the only earnest notes in the opening day of the working session, designed to consolidate the 1,000,000,000 peoples of Africa and Asia

against colonialism and to unify them in a common economic and cultural force for world peace.



Burst Artery Proves Fatal To Physicist

Father of Atom Age Passes at Princeton

By EDWARD ELLES, Staff Writer.

Albert Einstein, hailed by some as the greatest genius of all time, died quietly at 1:15 a.m. today in Princeton Hospital in Princeton, N. J., at 76.

Death was due to a rupture of the aorta, the body's main artery, caused by a narrowing of the arteries. His death had first been attributed to a gall bladder condition but an autopsy showed differently.

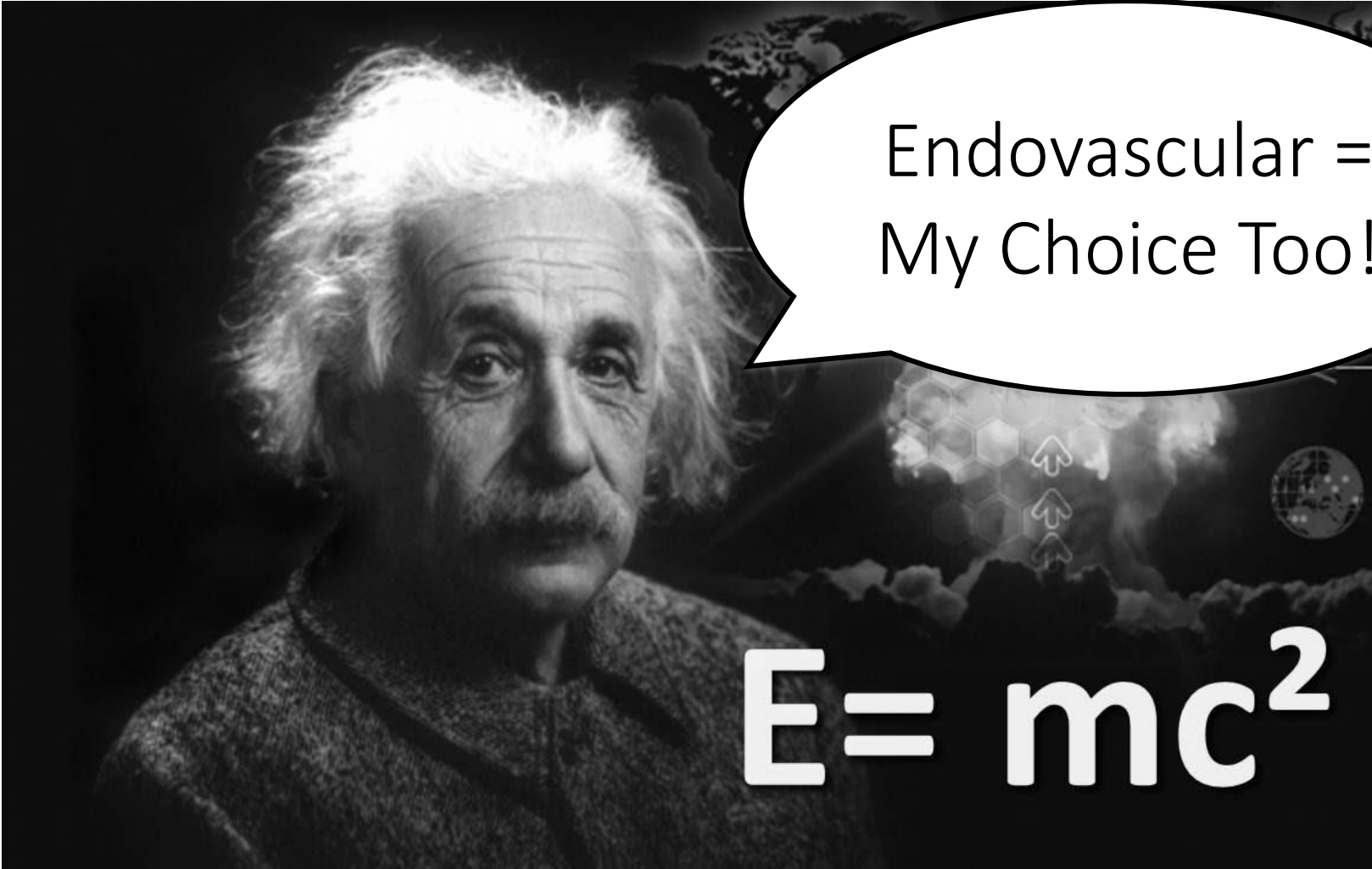
Dr. Einstein, his physicians revealed after his death, made a decision in the field of medicine a few days ago and, typically, it was correct. They had left it up to him whether surgery should be attempted to alleviate his illness. The scientist violently opposed surgery and the surgeons' opinion today it would not have helped the condition. Dr. Einstein had been right again.

One of his last acts was to work on a message to be delivered April 26 on the eve of the seventh anniversary of the founding of Israel. This was put aside, however, as his condition worsened. Shortly before he died, he breathed a few words in his native German.



Albert Einstein
14 March 1879 – 18 April 1955





Endovascular =
My Choice Too!

$$E = mc^2$$

