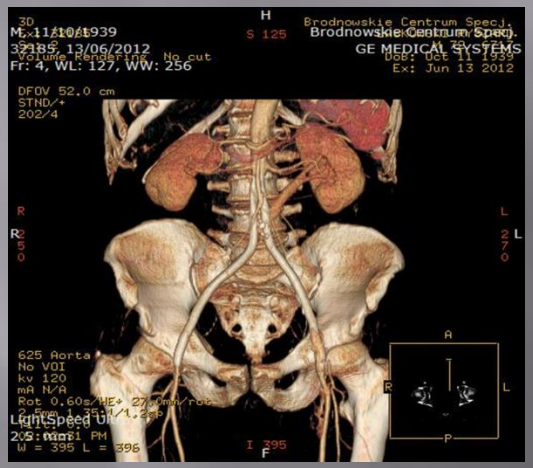
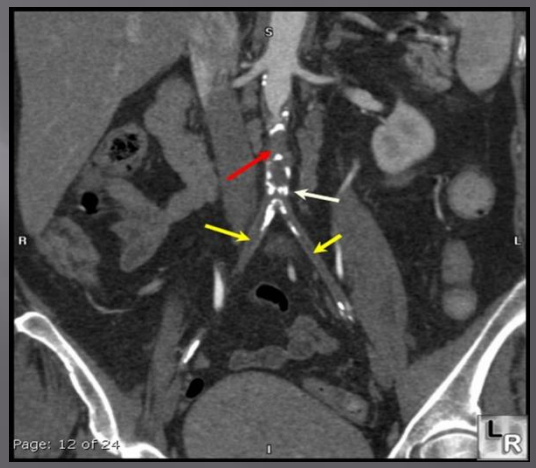
MEDICAL UNIVERSITY OF WARSAW

WHICH STENT FOR WHICH AORTA?

COVERED STENT IS BETER





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DISCLOSURES

Financial Support: None.

Conflict of Interest: None

What is the difference between bare and covered stent?

Bare stent

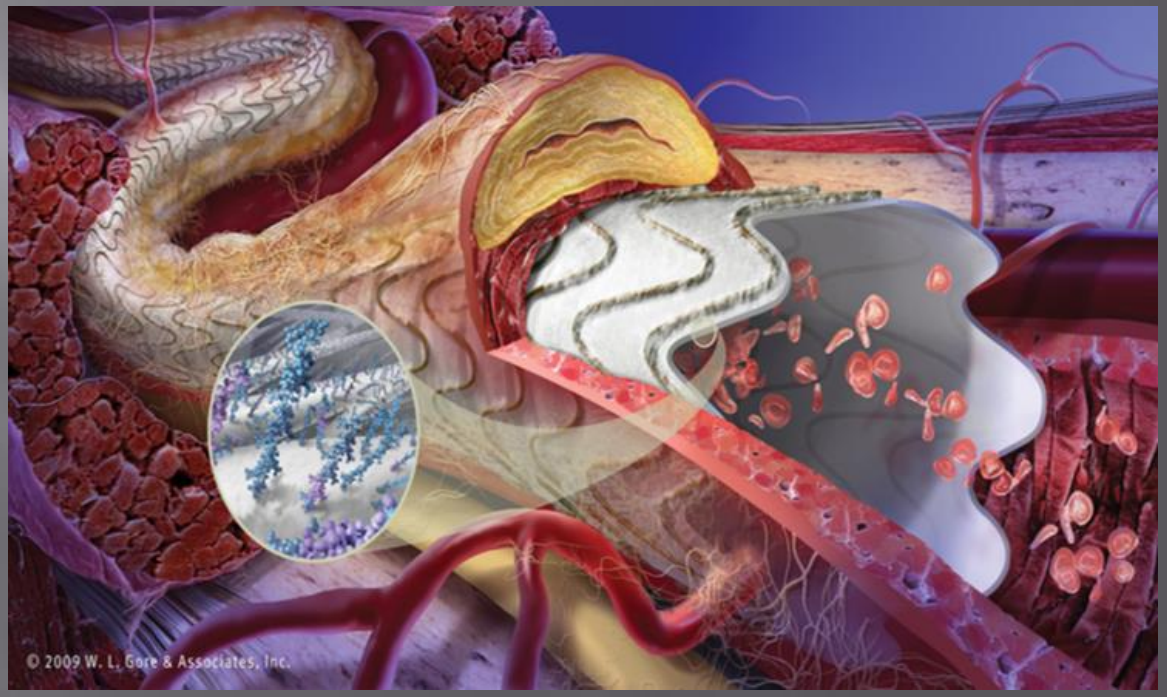
Covered stent

STENTGRAFT/COVERED STENT

Separates lumen of a new vessel from instable atheromatic plaques or thrombus so guarantees easy flow

Reduces possibility of distal embolization

Prevents the hemorraghe in case of rupture of aorta or iliac artery



Comparison of covered and bare stents

BARE STENT

1. Cheap, widely used
2. Do not close collaterals
3. Do not stop intimal hyperplasia restenosis
4. Risk of releasing of embolic materials
5. Needs smaller access size for implantation

COVERED STENT

1. Expensive, special destiny
2. Closes collaterals
3. Stops intimal hyperplasia restenosis
4. small risk of releasing of embolic materials
5. Needs bigger access size for implantation

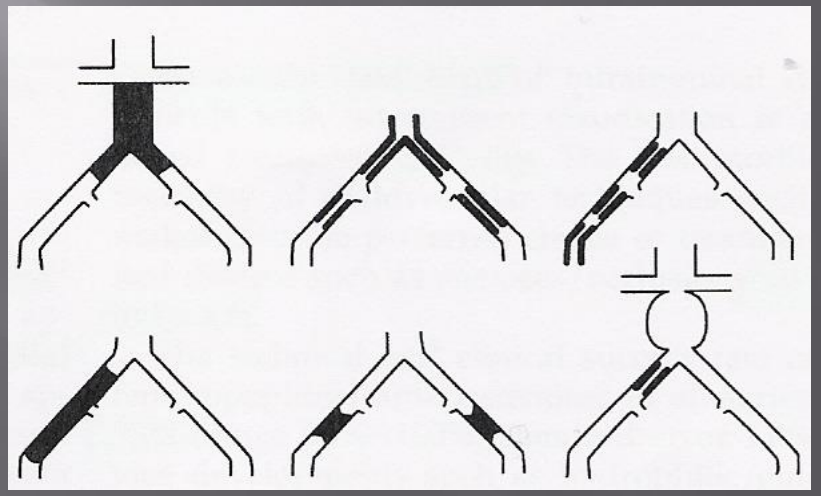
Aortic pathology to be treated

COVERED STENT	BARE STENT
Aneurysm	
Dissection	Dissection
Trauma/rupture	
Fistula A-V	
Stenosis	Stenosis
Occlusion	Occlusion

Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II)

L. Norgren , W.R. Hiatt, b J.A. Dormandy, M.R. Nehler, K.A. Harris, and F.G.R. Fowkes on behalf of the TASC II Working Group, Örebro, Sweden and Denver, Colorado

D – open surgery



- Unilateral CIA-EIA occlusion
- aorto-iliac occlusion
- bilateral EIA occlusion

JVS January 2007

Infrarenal aortoiliac occlusions

- Endovascular treatment ? Yes!!

  It`s feasible and gives good results

- Growing number of papers confirms good results of endovascular aortoiliac stenting and superiority of covered over bare stents in this indication.

- All endovascular procedures on aorta are executed against TASC II recomendations

Literature 2010-2014

- 1. Lun, Y., et al. (2014). "Comparison of Midterm Outcomes between Surgical Treatment and Endovascular Reconstruction for Chronic Infrarenal Aortoiliac Occlusion." J Vasc Interv Radiol.
- 2. Yuan, L., et al. (2014). "Endovascular therapy for long-segment atherosclerotic aortoiliac occlusion." J Vasc Surg 59(3): 663-668.
- 3. Wressnegger, A., C.M. Kinstner, and M. Funovics, Treatment of the aorto-iliac segment in complex lower extremity arterial occlusive disease. J Cardiovasc Surg (Torino), 2014.
- 4. Schmalstieg, J., et al., Long term data of endovascularly treated patients with severe and complex aortoiliac occlusive disease. J Cardiovasc Surg (Torino), 2012. 53(3): p. 291-300.
- 5. Grimme, F.A., et al., Covered stents for aortoiliac reconstruction of chronic occlusive lesions. J Cardiovasc Surg (Torino), 2012. 53(3): p. 279-89.
- 6. Ye, W., et al., Early and late outcomes of percutaneous treatment of TransAtlantic Inter-Society Consensus class C and D aorto-iliac lesions. J Vasc Surg, 2011. 53(6): p. 1728-37.5): p. 1545-6; author reply 1546.
- 7. Mwipatayi, B.P., et al., A comparison of covered vs bare expandable stents for the treatment of aortoiliac occlusive disease. J Vasc Surg, 2011. 54(6): p. 1561-70.
- 8. Indes, J.E., et al., Endovascular procedures for aorto-iliac occlusive disease are associated with superior short-term clinical and economic outcomes compared with open surgery in the inpatient population. J Vasc Surg, 2010. 52(5): p. 1173-9, 1179 e1.

CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES IN VASCULAR SURGERY
JANUARY 23-25 2014
MARRIOTT RIVE GAUCHE & CONFERENCE CENTER PARIS, FRANCE

Endovascular repair of occlusive aortic syndrome: how I do it

Andrea Stella

www.cacvs.org

COVERED STENT IS BETTER?

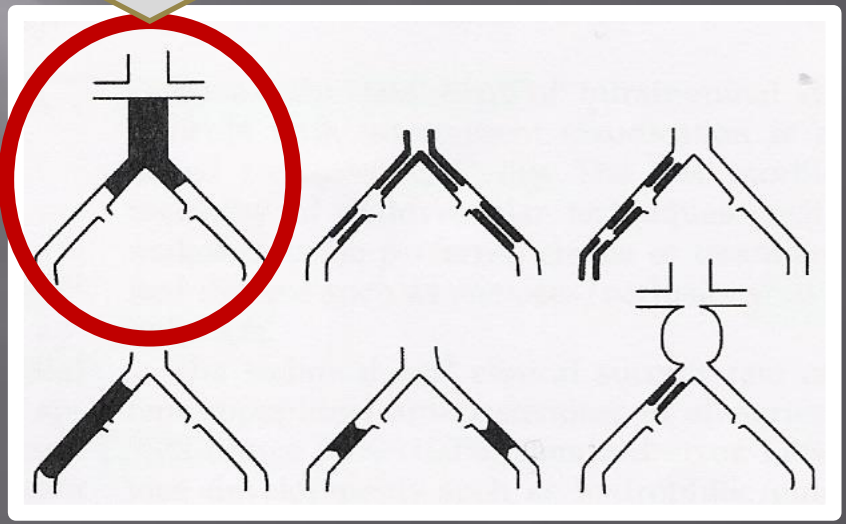
The most cases of aortoiliac occlusions at the level of aorta`s bifurcation and iliac arteries can be treated with both: bare and covered stents

Inter-Society Co[illegible]e Management of Peripheral [illegible]se (TASC II)

L. Norgren , W.R. Hia[illegible]hler, K.A. Harris, and F.C[illegible]up,

3% to 8.5% of patients with aortoiliac occlusive disease.

D – open surgery



Juxtarenal aortoiliac occlusion

JVS January 2007

COVERED STENT IS BETTER?

For repair the juxtarenal aortic occlusion use of stentgrafts is the only sensible solution because of the risk of aortic rupture or releasing distal emboli during the procedure.

Endovascular treatment of the juxta-renal aorto-iliac occlusions during the years 2012-2014 - single center experience

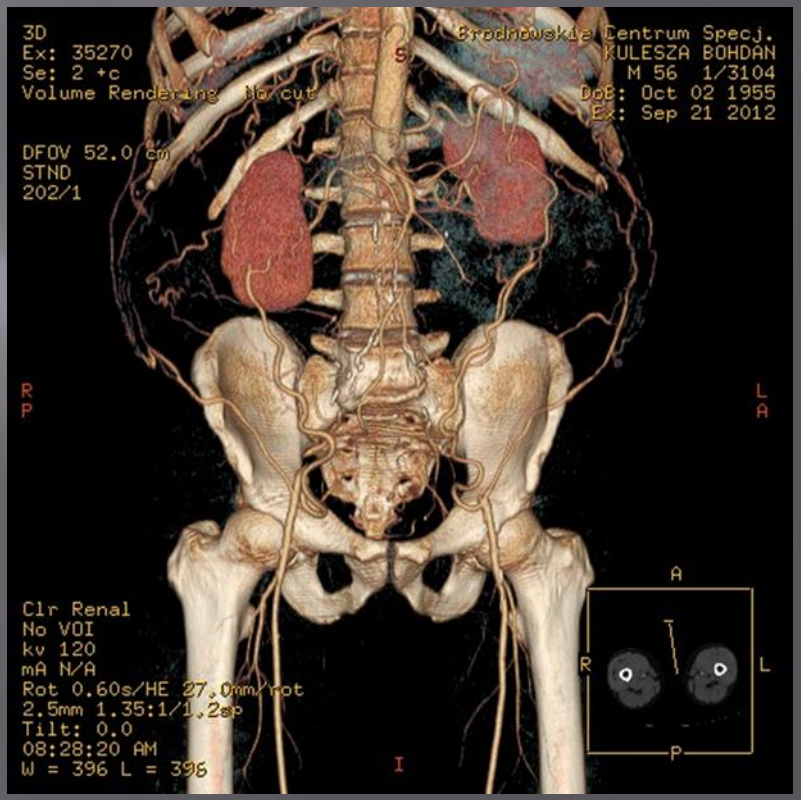
- ***Piotr Ciostek, Grażyna Łaska, Piotr Myrcha & team of:***
- 1st Chair and Clinic of General and Vascular Surgery, 2nd Medical Faculty
- Medical University of Warsaw

  Mazowiecki Szpital Bródnowski

Endovascular treatment of the juxta-renal aorto-iliac occlusions

- 2012 - 2014
- 14 patients with
  juxta - renal aortoiliac occusions

Leriche Syndrom



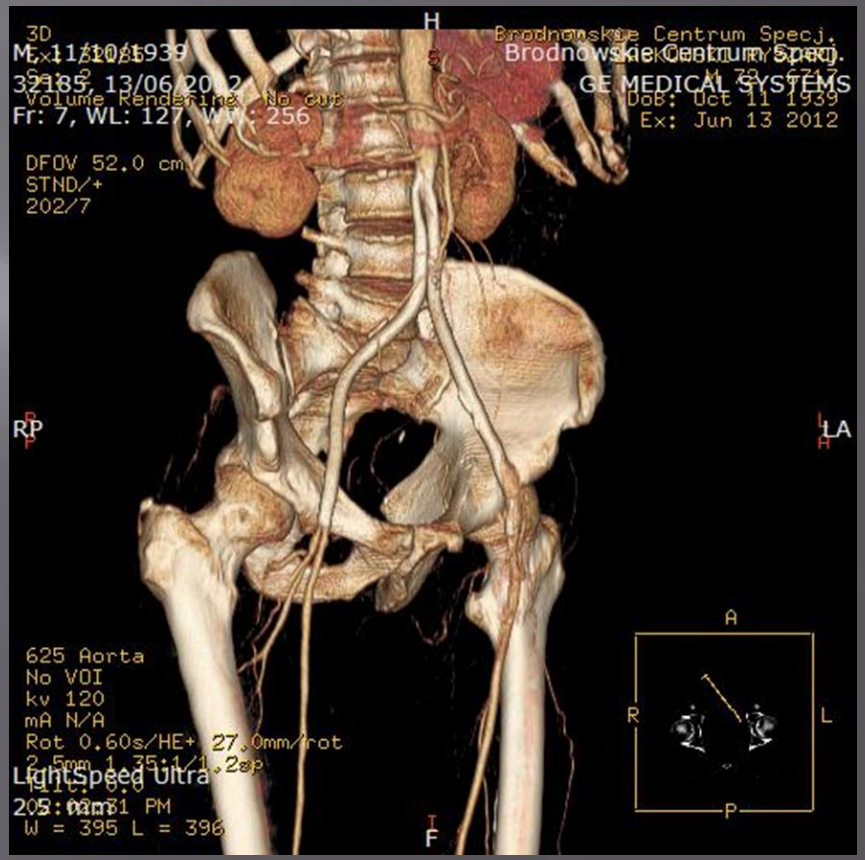
Patients characteristics - comorbidity

Sex	Age	D.M.	COPD	HTA	IHD	Mal nu trition	CLI Fontaine	Hiperli pidemia	Nicoti nism
M	57	+	++	+	++	-	III	+	+
M	64	-	-	+	+		IV	+	+
M	60	+	-	+	-	+	III	-	+
M	73	-	-	+	+++		III	+	+
M	60	+	-	+	+++	++	IV	+	+
K	63	-	-	+	++	-	II	+	+
K	61	-	+	+	+	+	III	+	+
M	63	-	+	+	+	+	III	+	+
M*	**61**	**-**	**-**	**-**	**+++**	**-**	**IV**	**+**	**+**
K*	**62**	**-**	**++**	**+**	**-**	**-**	**IV**	**+**	**+**
M	**58**	**+**		**+**	**++**	**-**	**IV**	**+**	**+**
M	**49**	**-**	**-**	**+**	**+**	**-**	**IV**	**+**	**+**
M*	**79**	**+**	**+**	**+**	**+++**	**+**	**IV**	**+**	**+**
K	**72**	**+**	**-**	**+**	**+**	**-**	**IV**	**+**	**+**

Endovascular treatment of the juxtarenal aorto-iliac occlusions

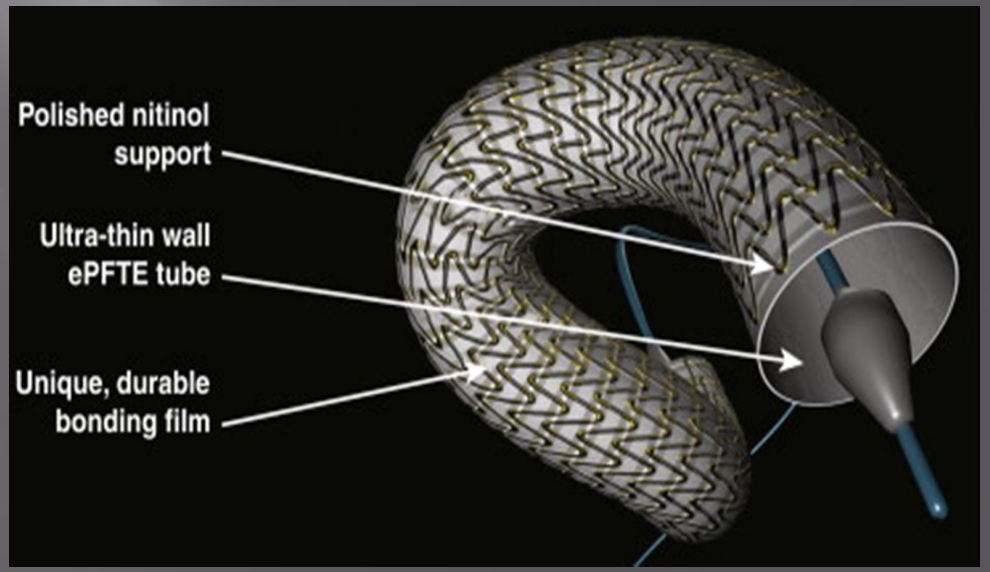
- Implantations of long peripheral stent grafts in aortic position toward femoral or iliac arteries.

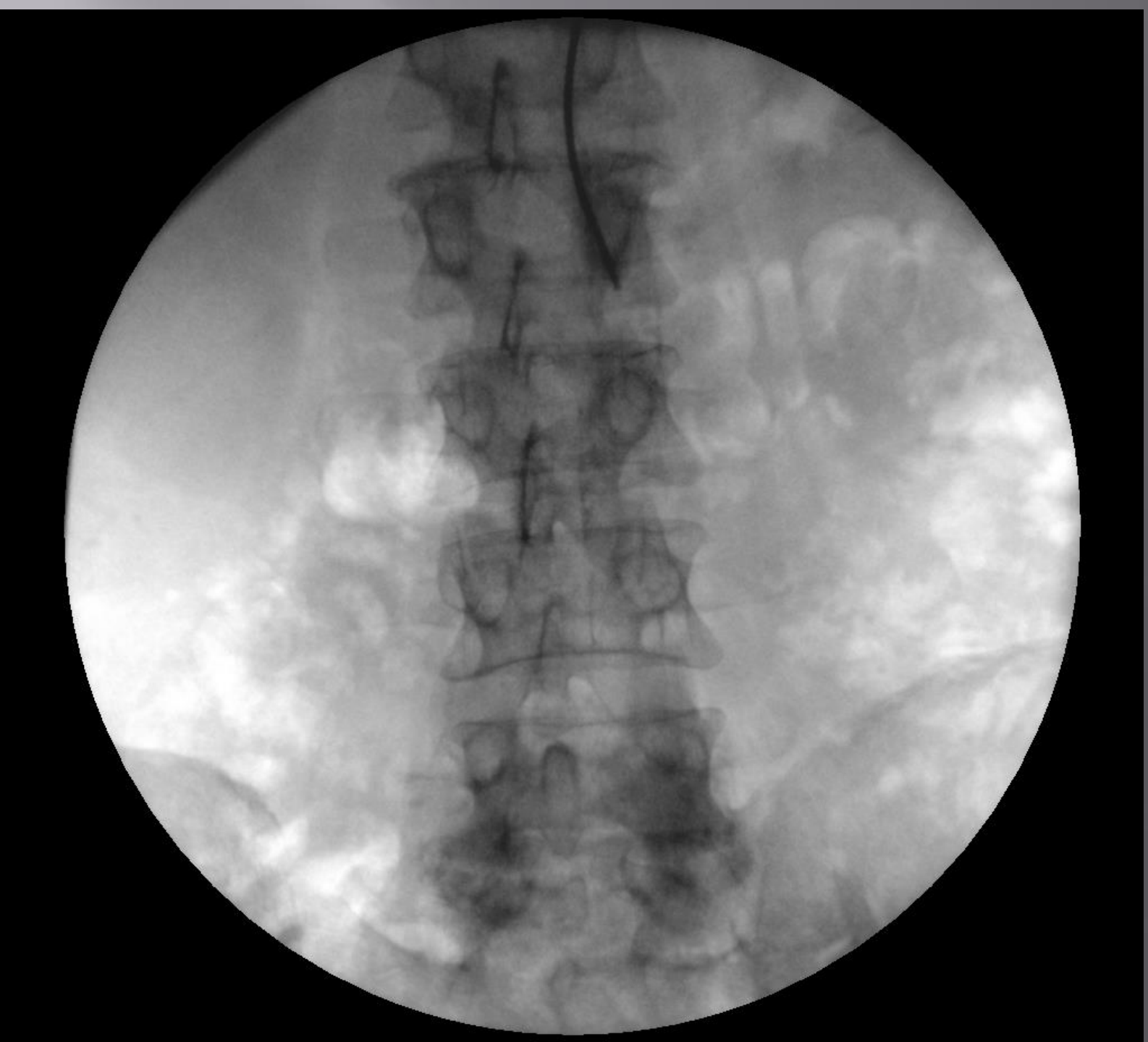
- Twelve bilateral
- Two unilateral



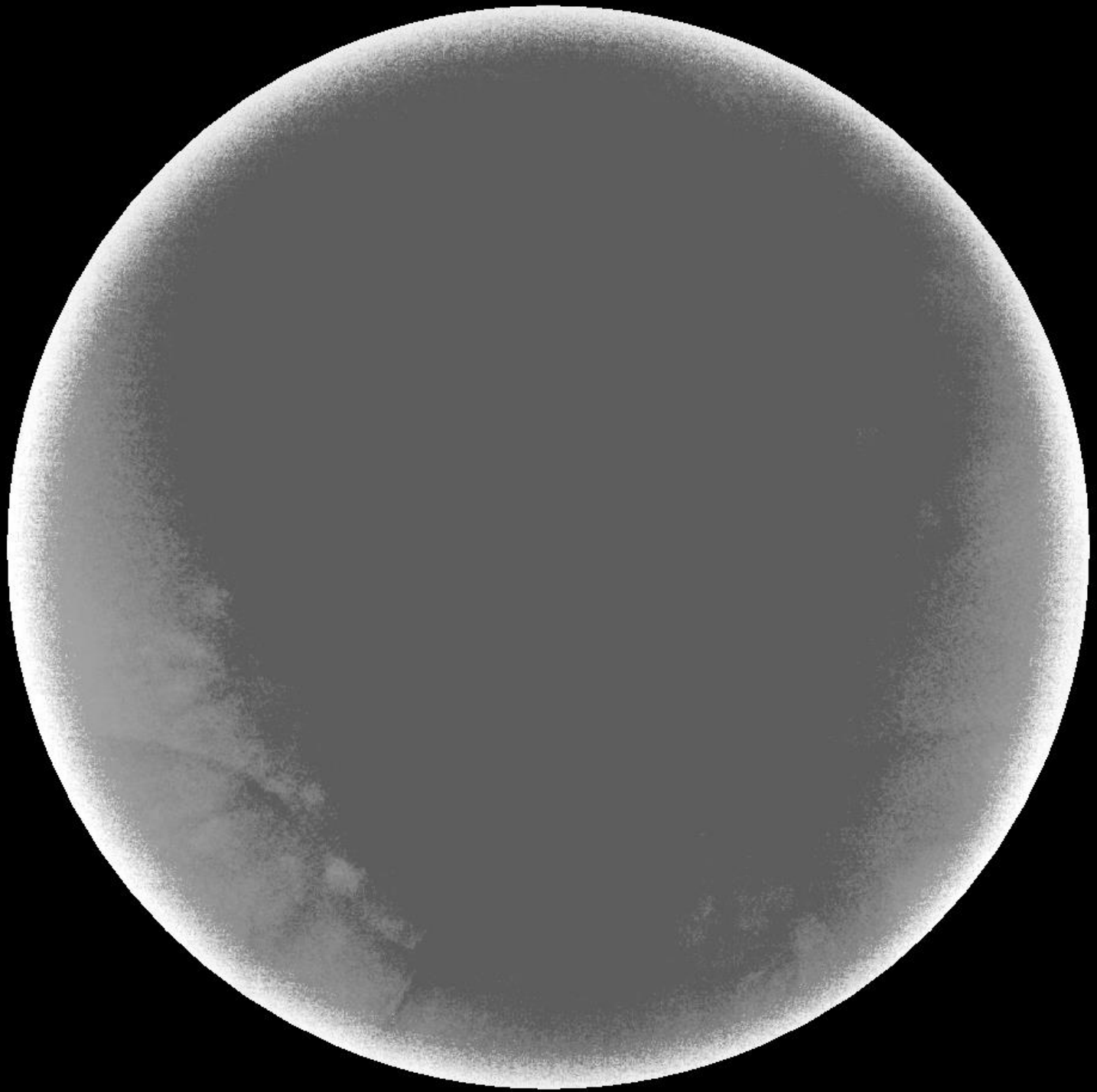
Endovascular treatment of the juxtarenal aorto-iliac occlusions

- VIABAHN STENTGRAFT
- Self expandable
- Elastic
- Enaugh long
- Proven long term patency

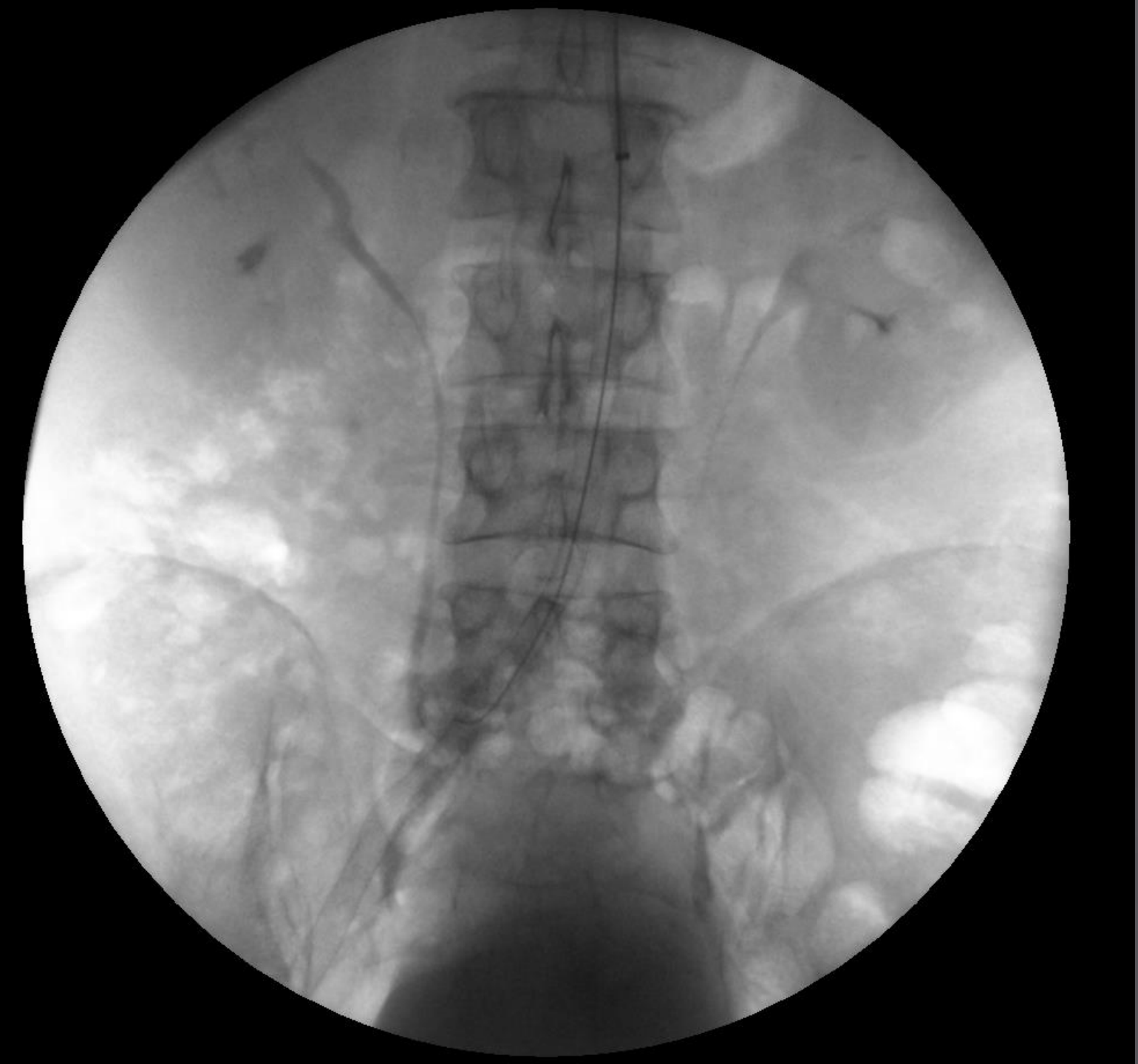




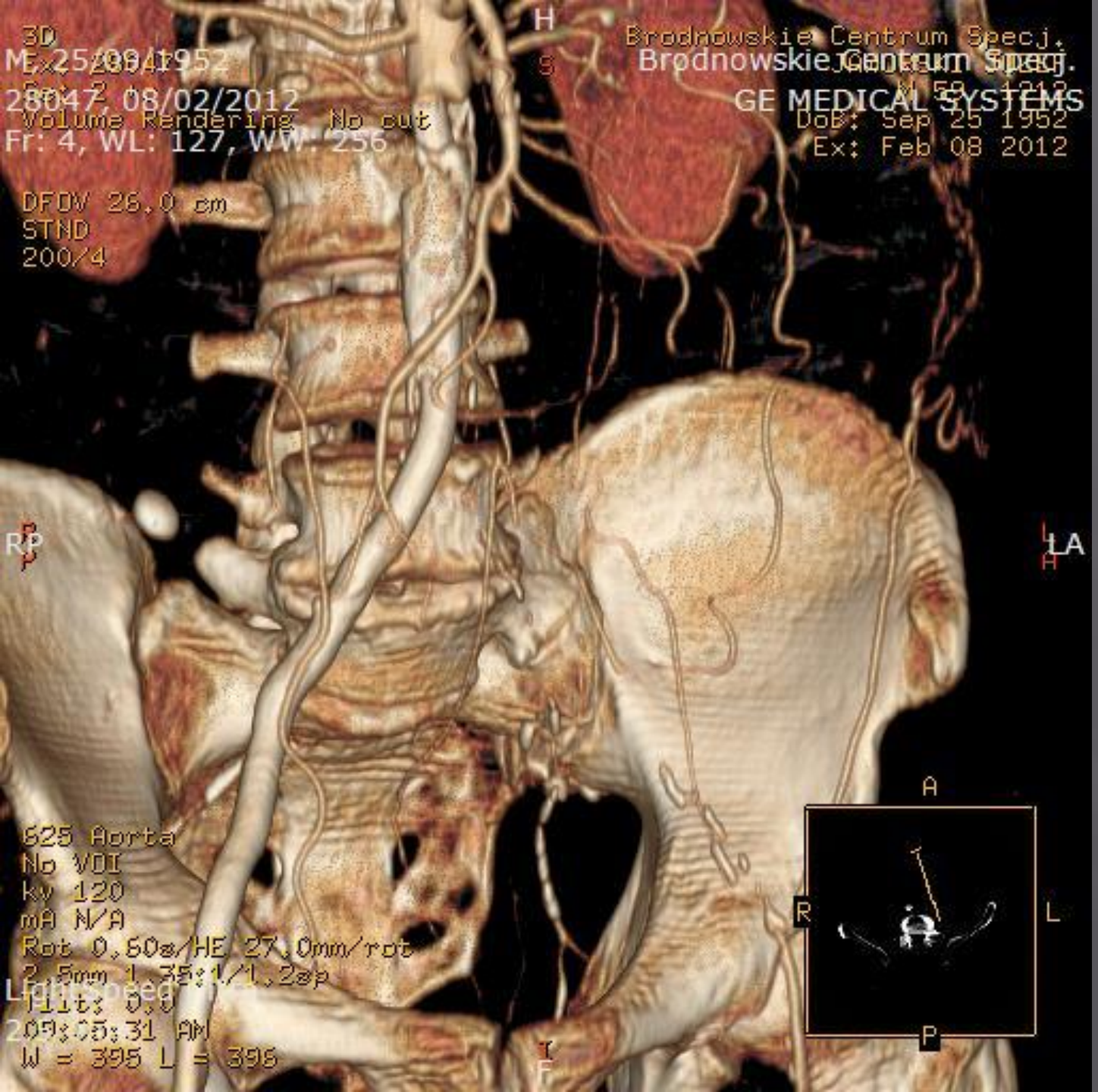
Recanalization with solely endovascular means



Antegrade transaxillar recanalization



Retrograde angioplasty and stentgrafts placement


3D
M, 25/09/1952
28047, 08/02/2012
Volume Rendering No cut
Fr: 4, WL: 127, WW: 256
DFOV 26.0 cm
STND
200/4
H
S
Brodnowskie Centrum Specj.
Brodnowskie Centrum Specj.
GE MEDICAL SYSTEMS
DoB: Sep 25 1952
Ex: Feb 08 2012
RP
LA
A
625 Aorta
No VOI
kV 120
mA N/A
Rot 0.60s/HE 27.0mm/rot
2.5mm 1.35:1/1.2sp
Light Speed
Tilt: 0.0
209:05:31 AM
W = 395 L = 395
I
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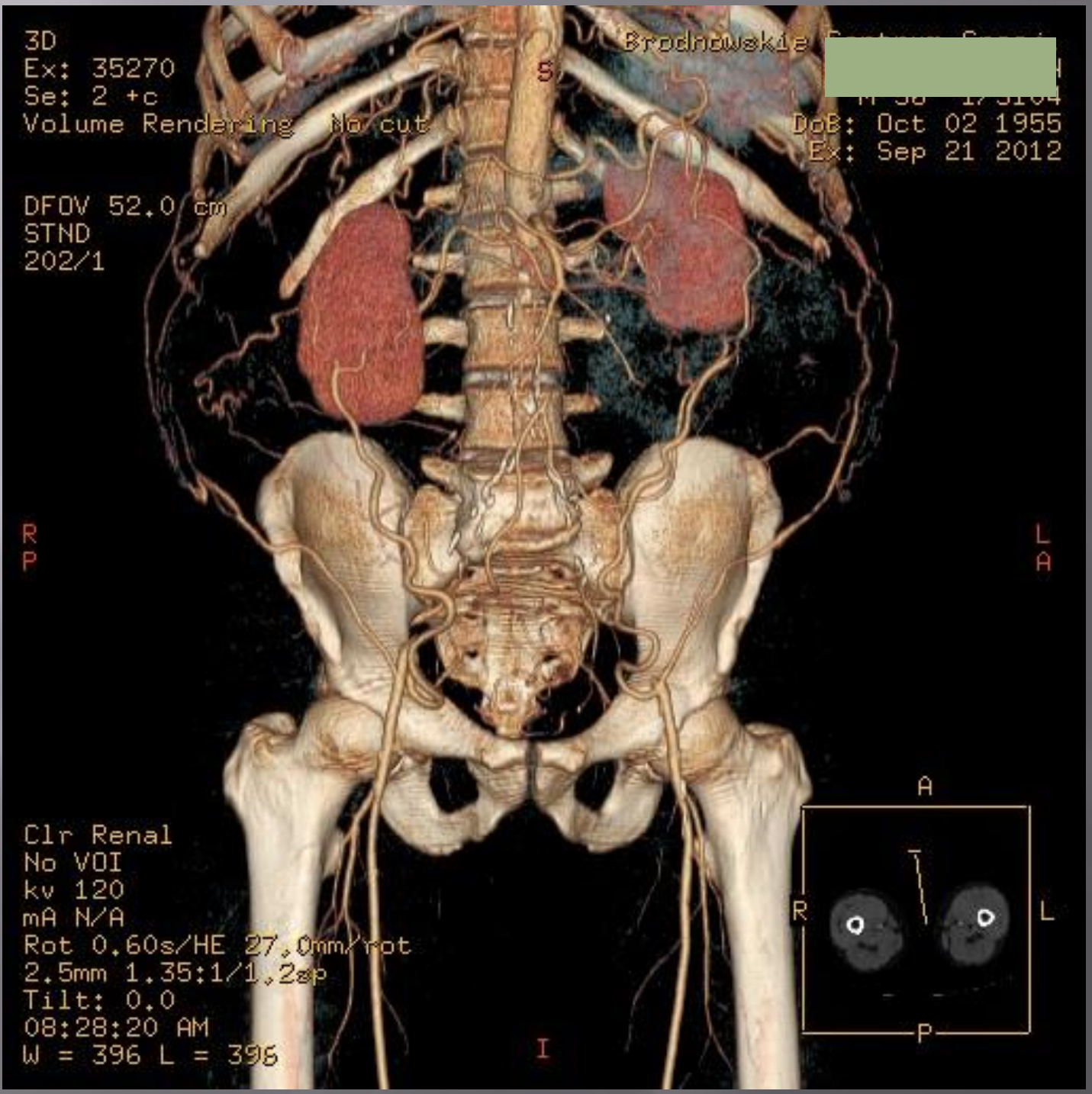
3D
Ex: 35270
Se: 2 +c
Volume Rendering No cut
DFOV 52.0 cm
STND
202/1
Brodnowskie
DoB: Oct 02 1955
Ex: Sep 21 2012
S
R
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L
A
Clr Renal
No VOI
kv 120
mA N/A
Rot 0.60s/HE 27.0mm/rot
2.5mm 1.35:1/1.2sp
Tilt: 0.0
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W = 396 L = 396
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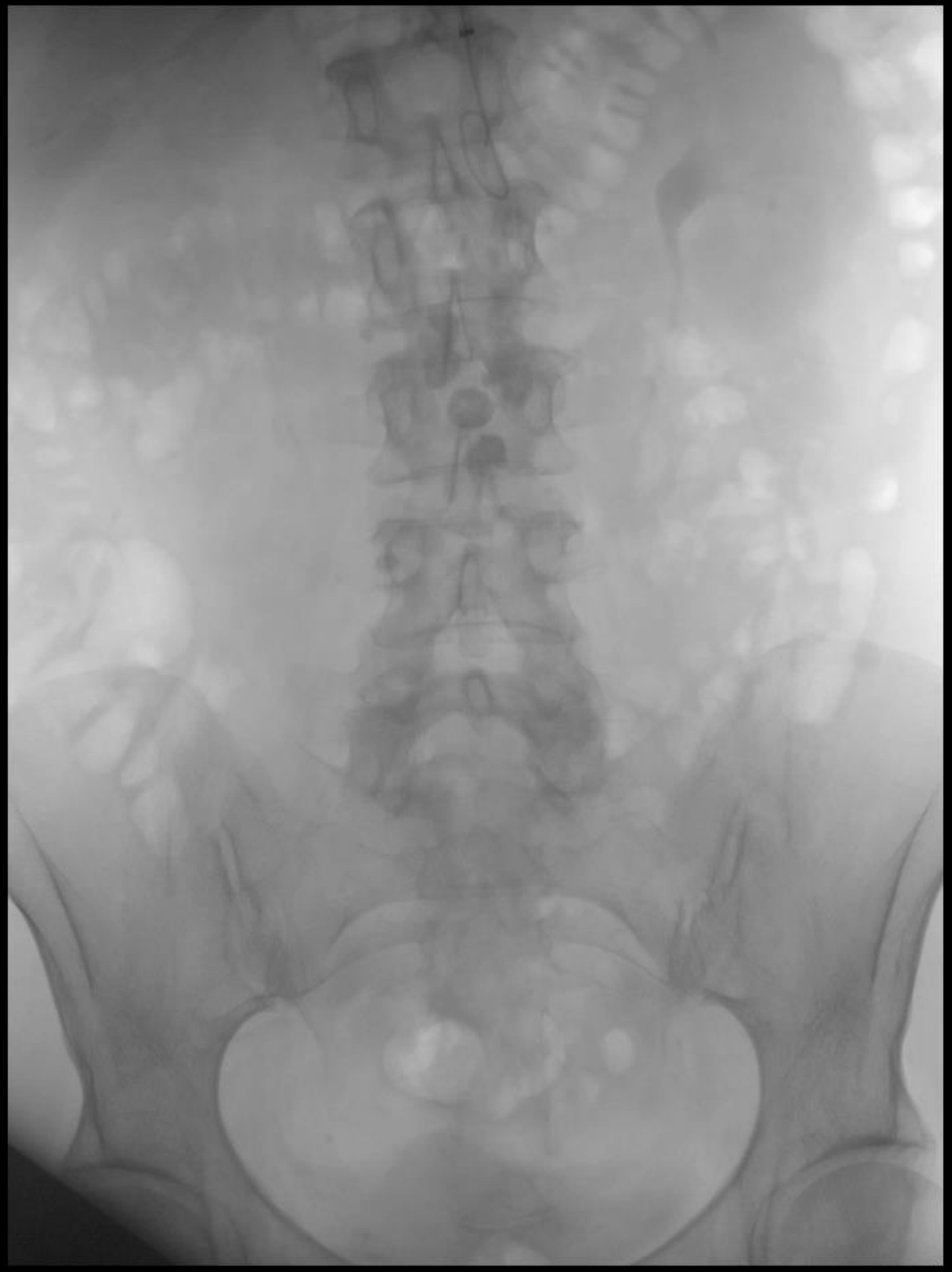
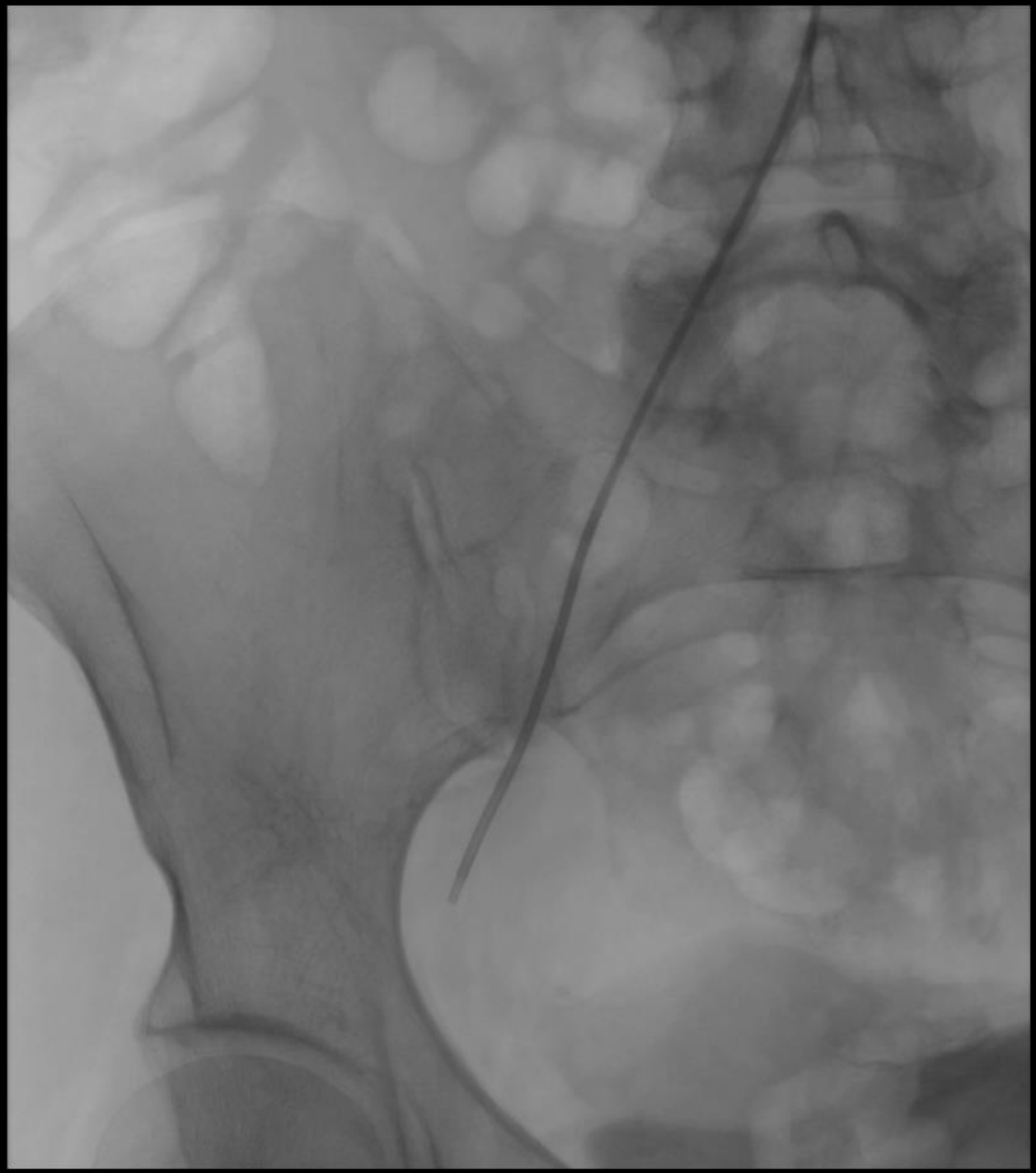
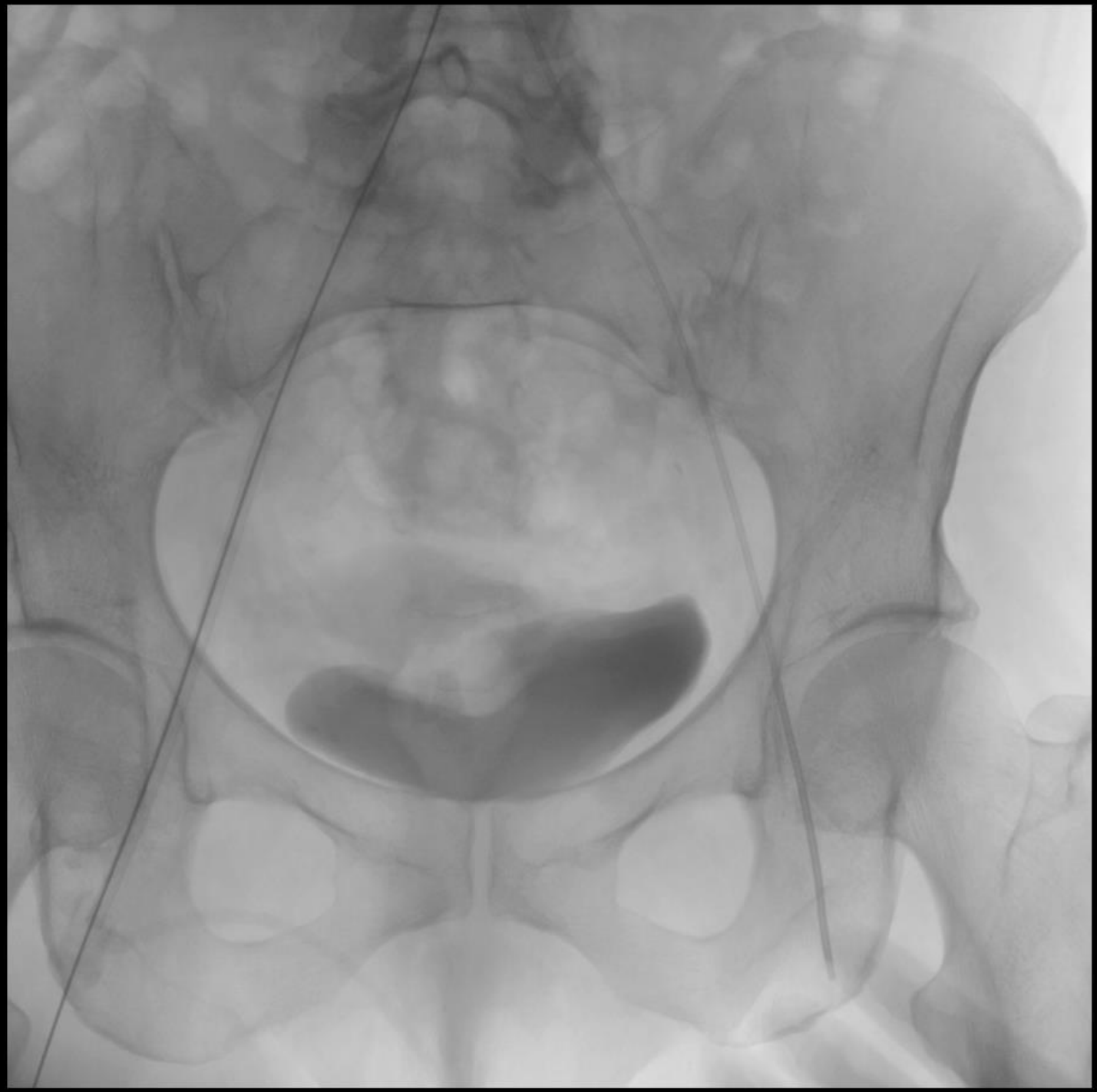
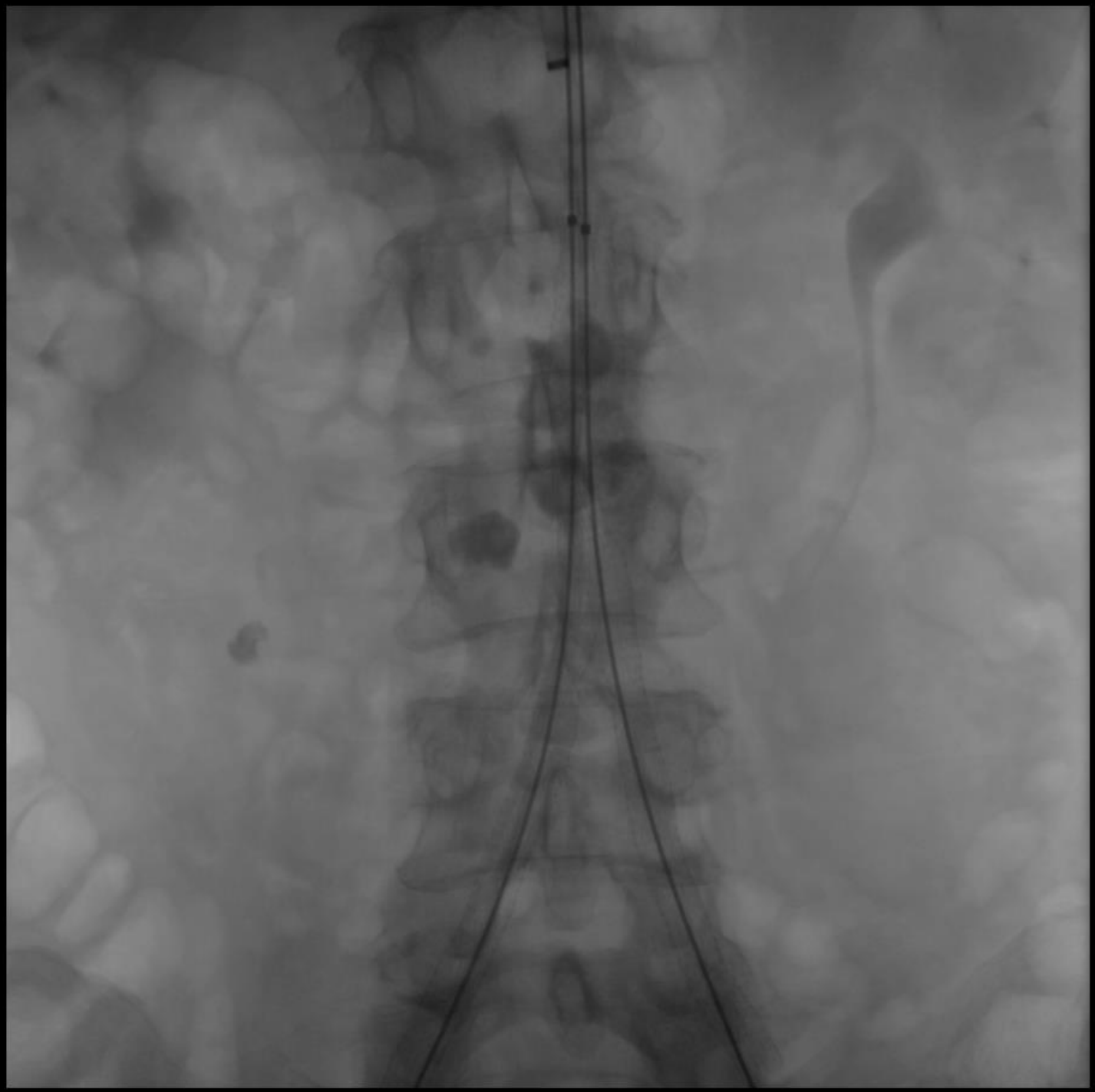


Bilateral procedure

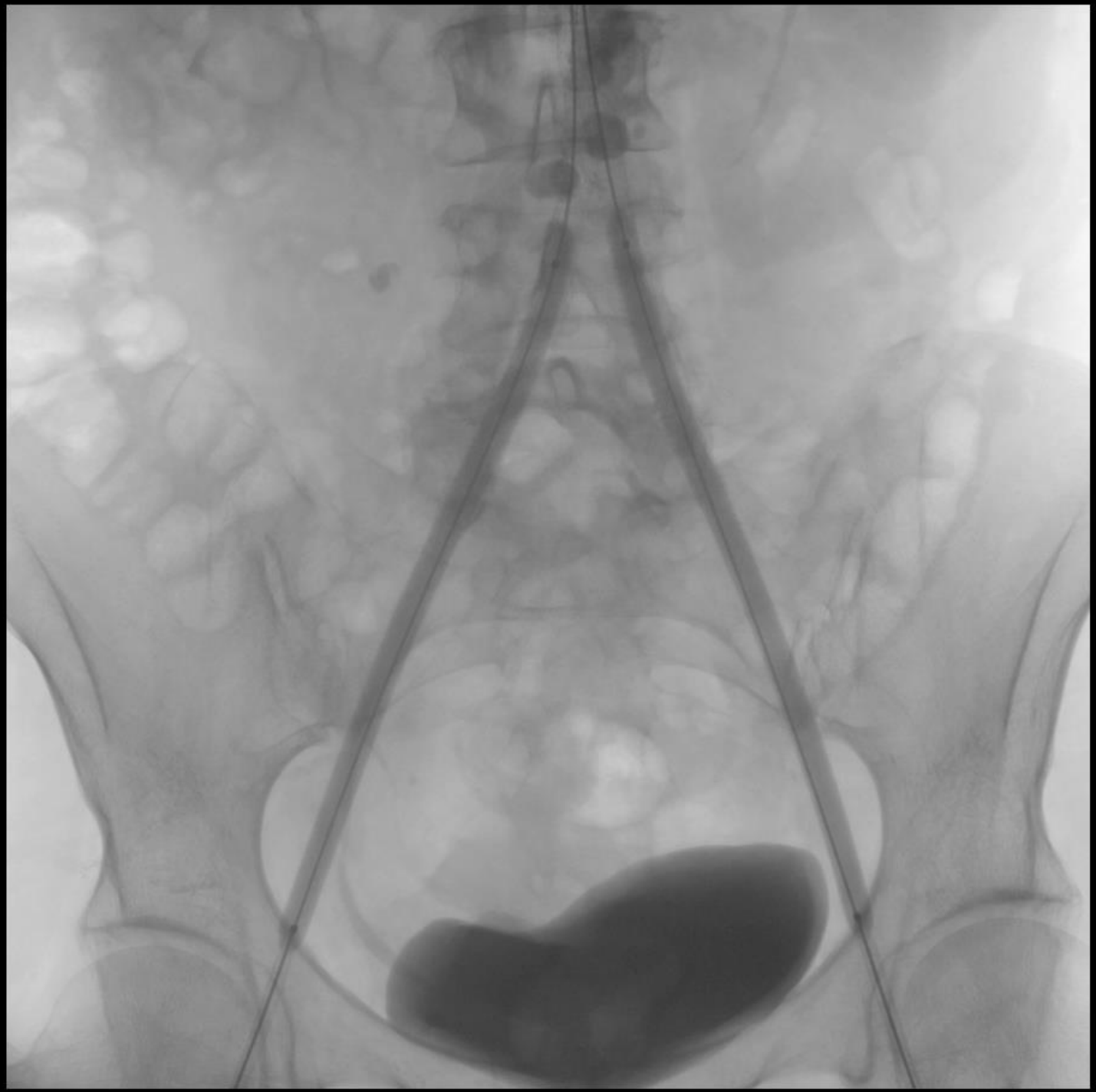


Checking out-flow

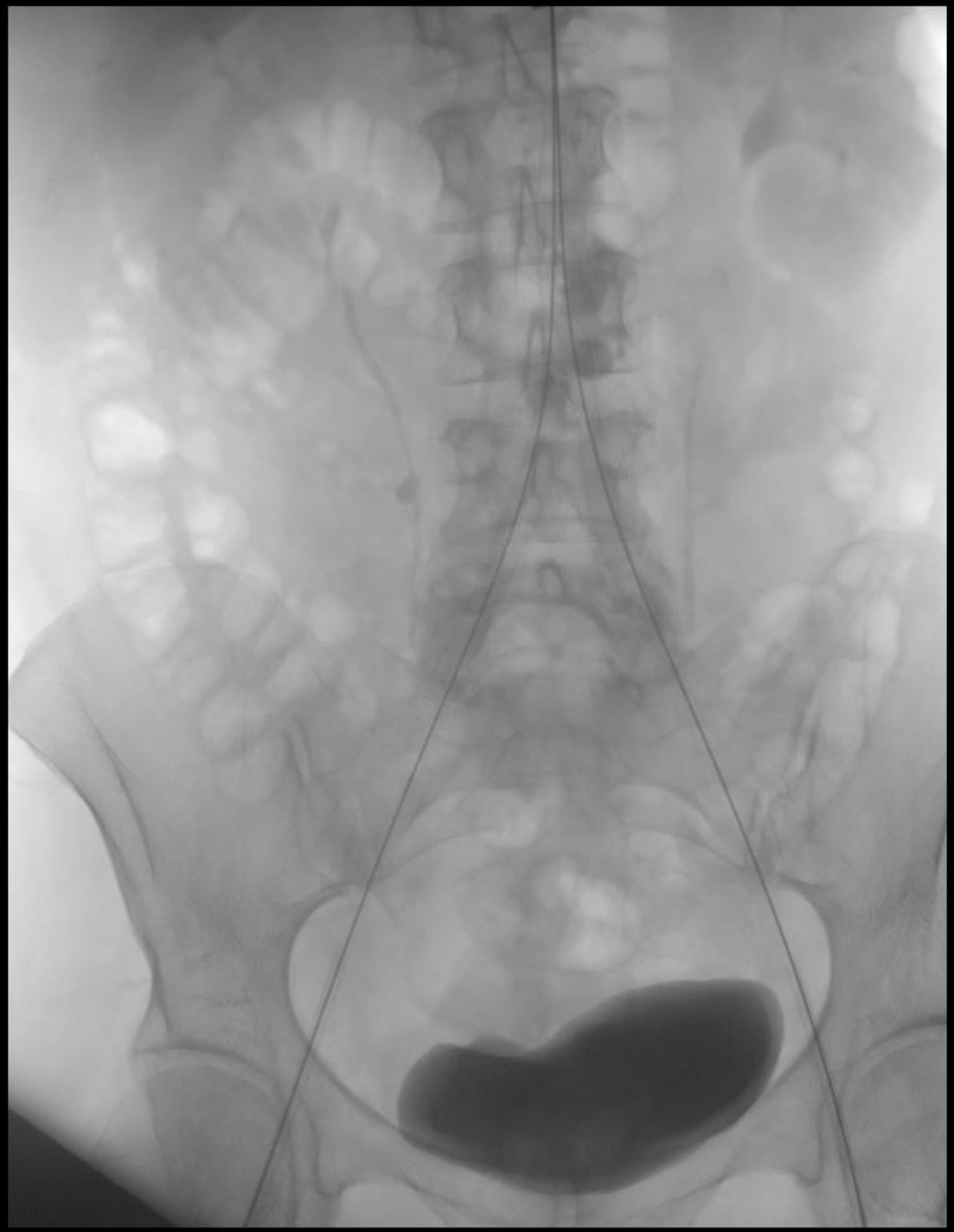




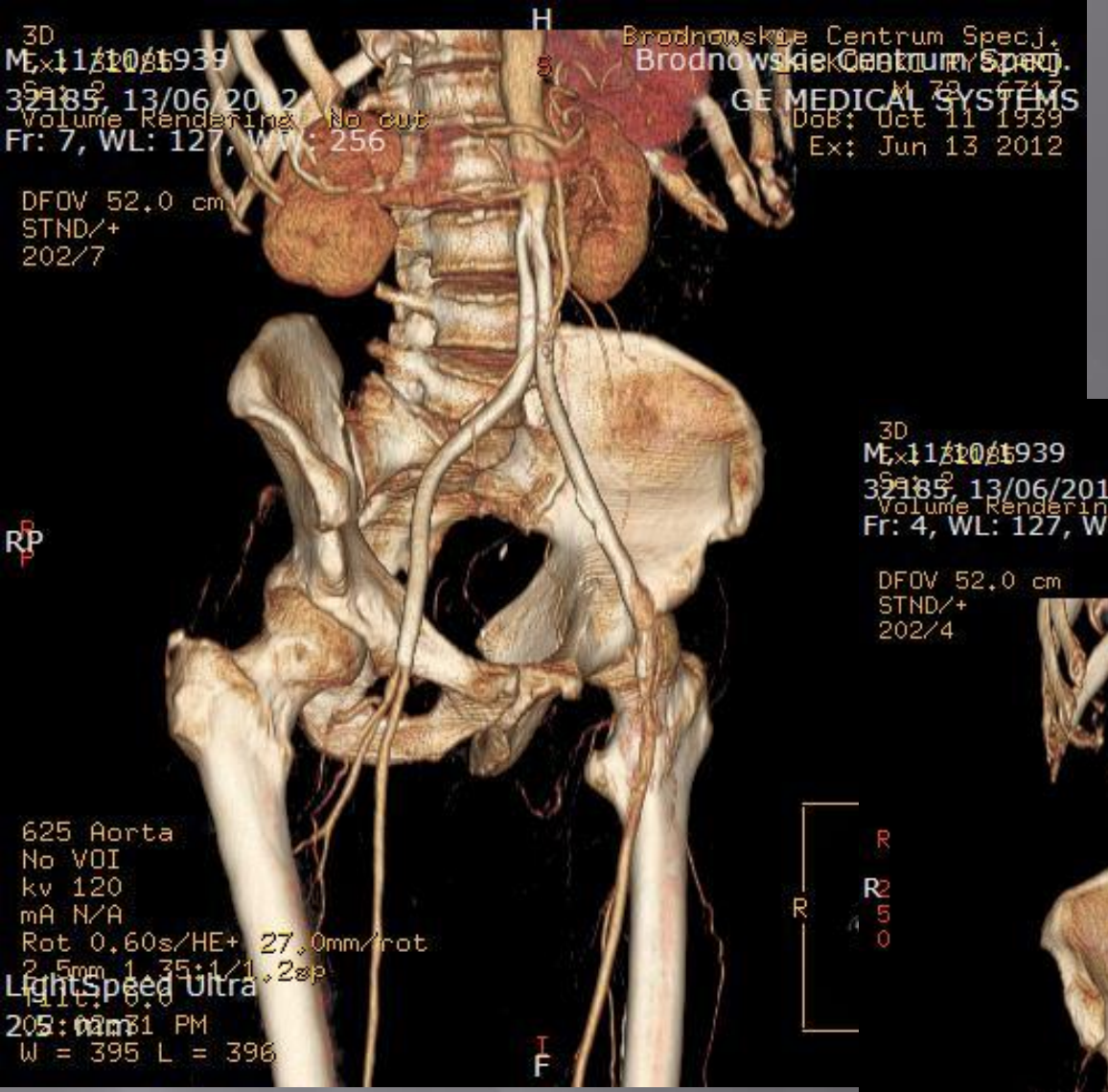
Viabahns placement

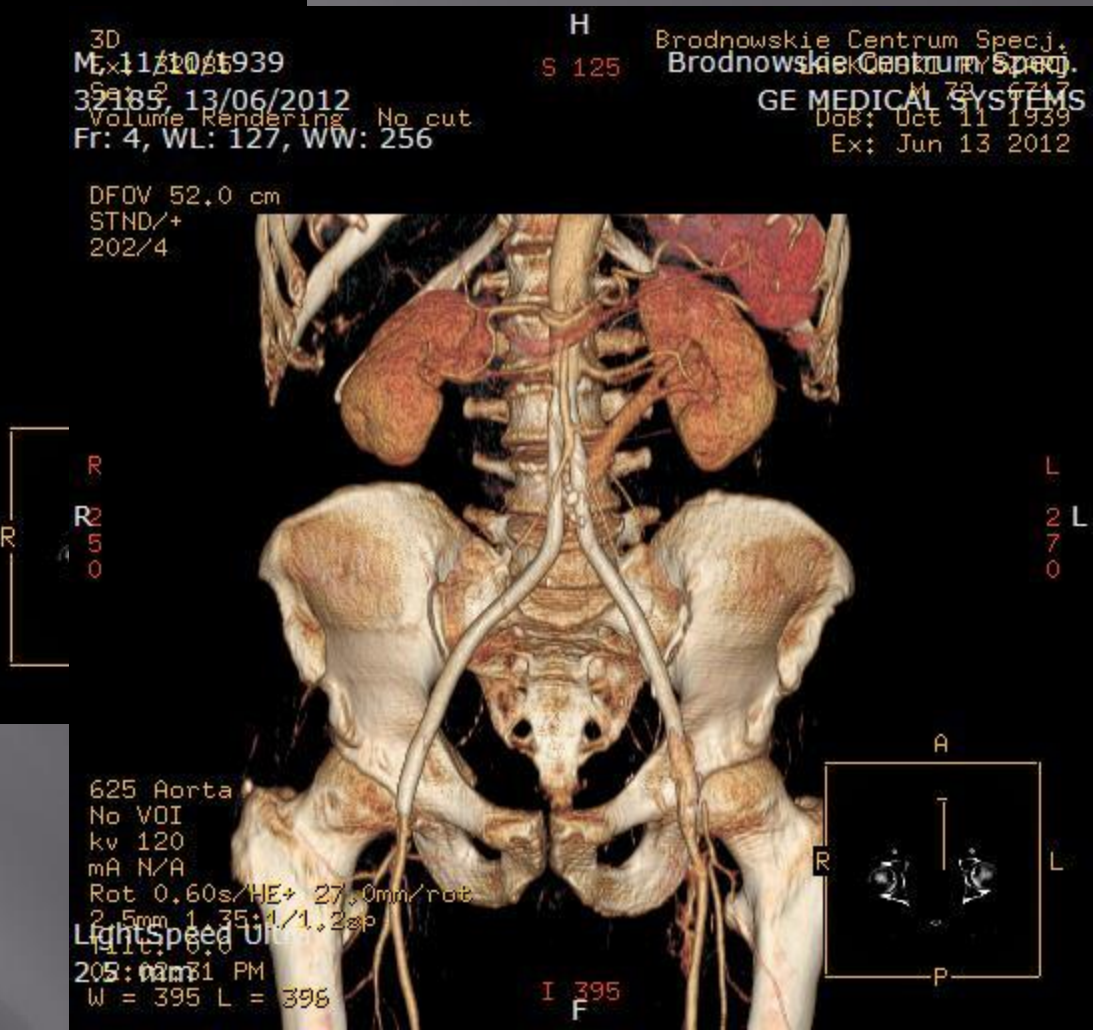


Postdilatation

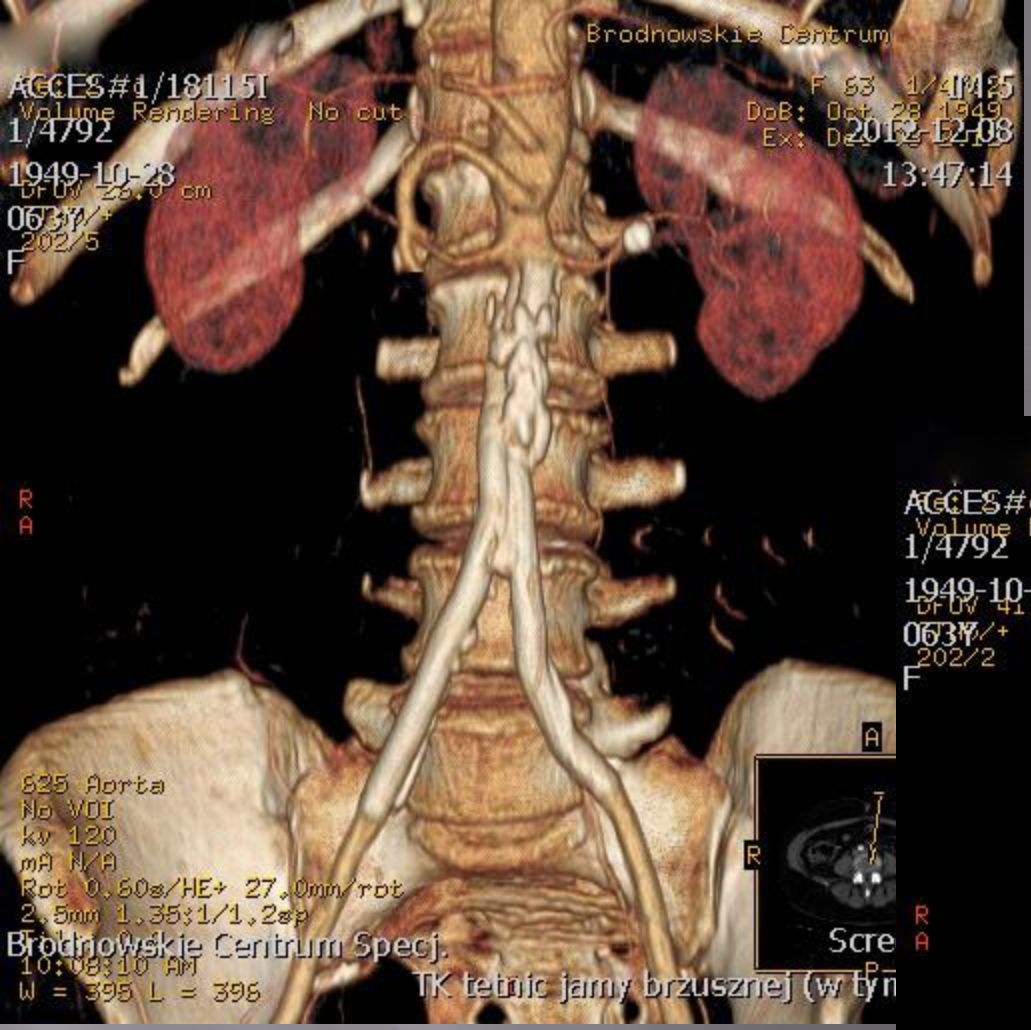


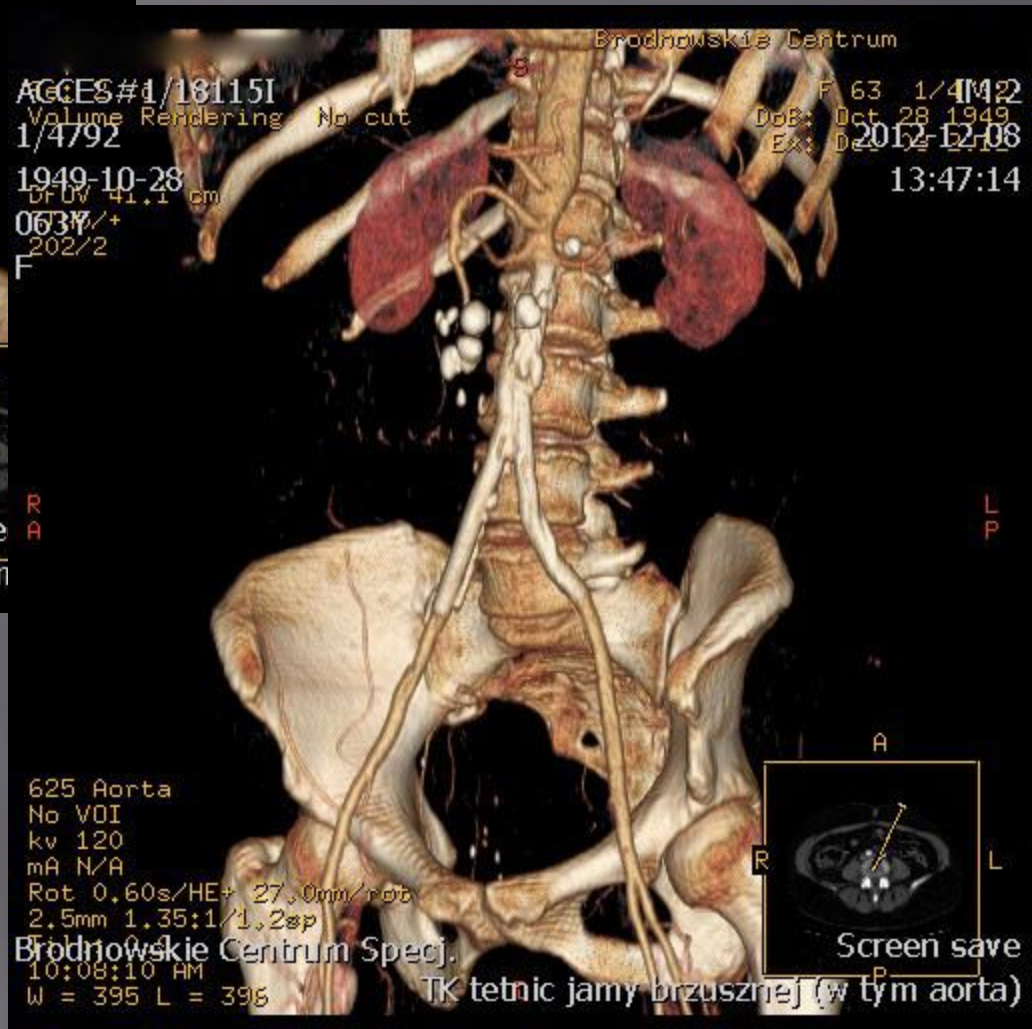
Final angio





Juxtarenal aorta
To common femoral art..





Juxtarenal aorta
To iliac arteries (3)

FOLLOW UP

3 to 34 months

18.2 months in average

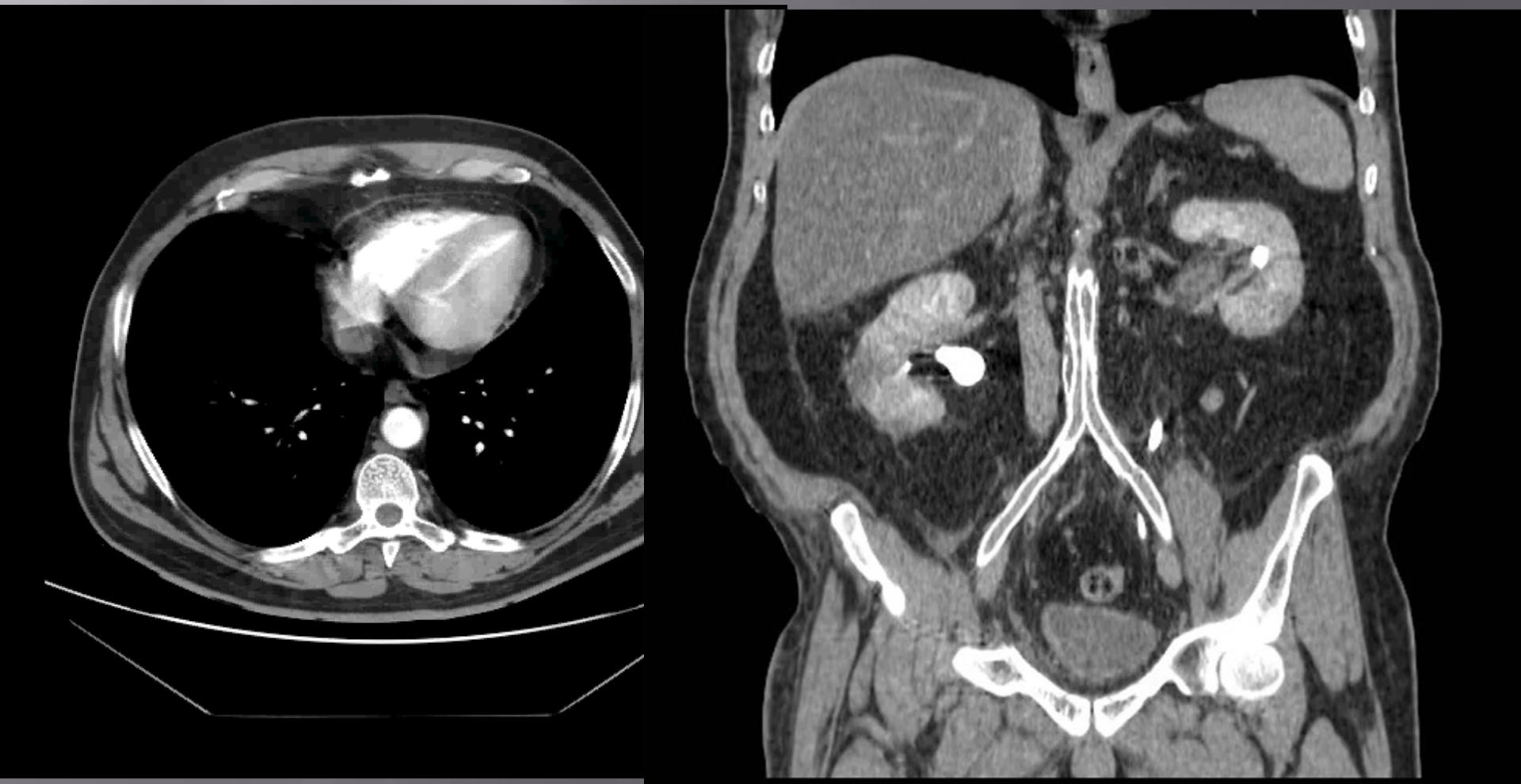
RESULTS

Patency post-op *3-34 months*	**100%**
Technical success	100%
Myocardial infarction	1/14 (7,1%)
Cerebral accident	0
Pumonary insufficiency	0
Major amputation	0
Graft infection	0
DEATH	1/14 (7,1%)

Minor Complications

Groin haematoma requaring surgical intervention	1/14 (7,1%)
Erectile dysfunction agravation.	1/14 (7,1%)
Renal microembolism with trancient renal dysfunction and recovery in one month	1/14 (7,1%)

Renal microembolism with trancient renal dysfunction and recovery in one month



Conclusions

- Endovascular stentgrafting for occlusive arterial disease is a technically feasible and potentially safe option for treatment of aortoiliac occlusive disease and demonstrates very good midterm patency.

- The method is particularly useful in high-risk patients who are otherwise unfit for major surgical reconstruction.

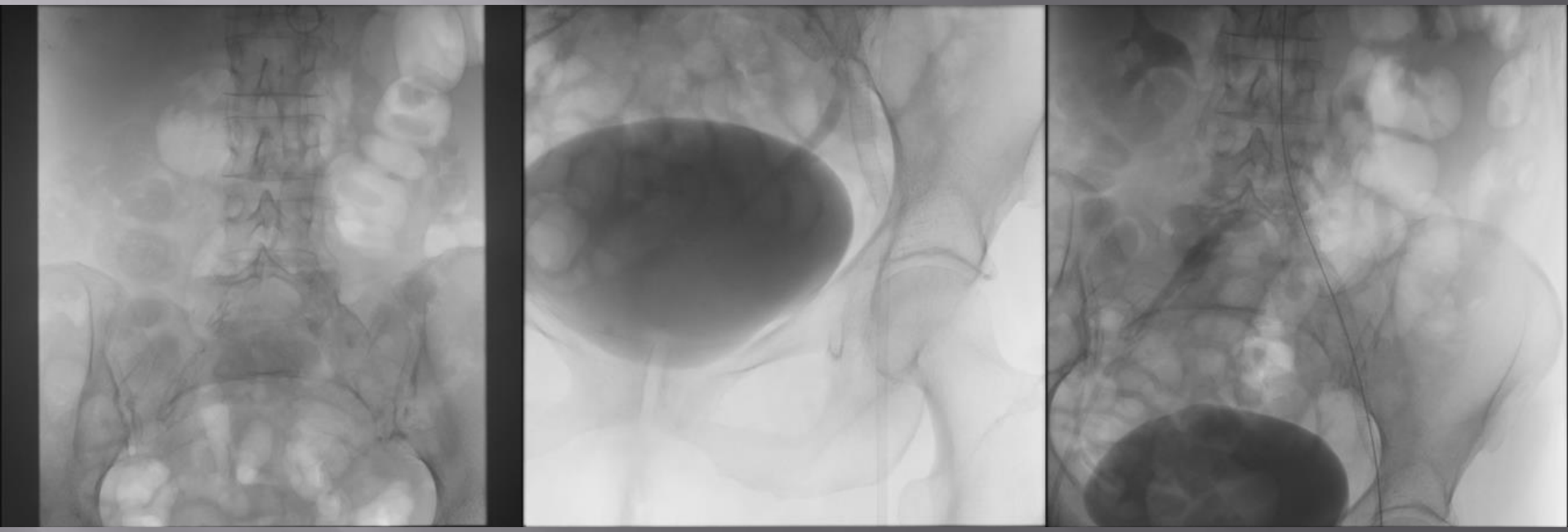
Conclusion

- Covered stents are the best and unavoidable technical solution in restoring blood flow through occluded juxta-renal aorta and iliac arteries.

Conclusion

- Covered stents are the best and unavoidable technical solution in restoring blood flow through occluded juxta-renal aorta and iliac arteries.

My Choice is-
La maja vestida



Thank you for your attention