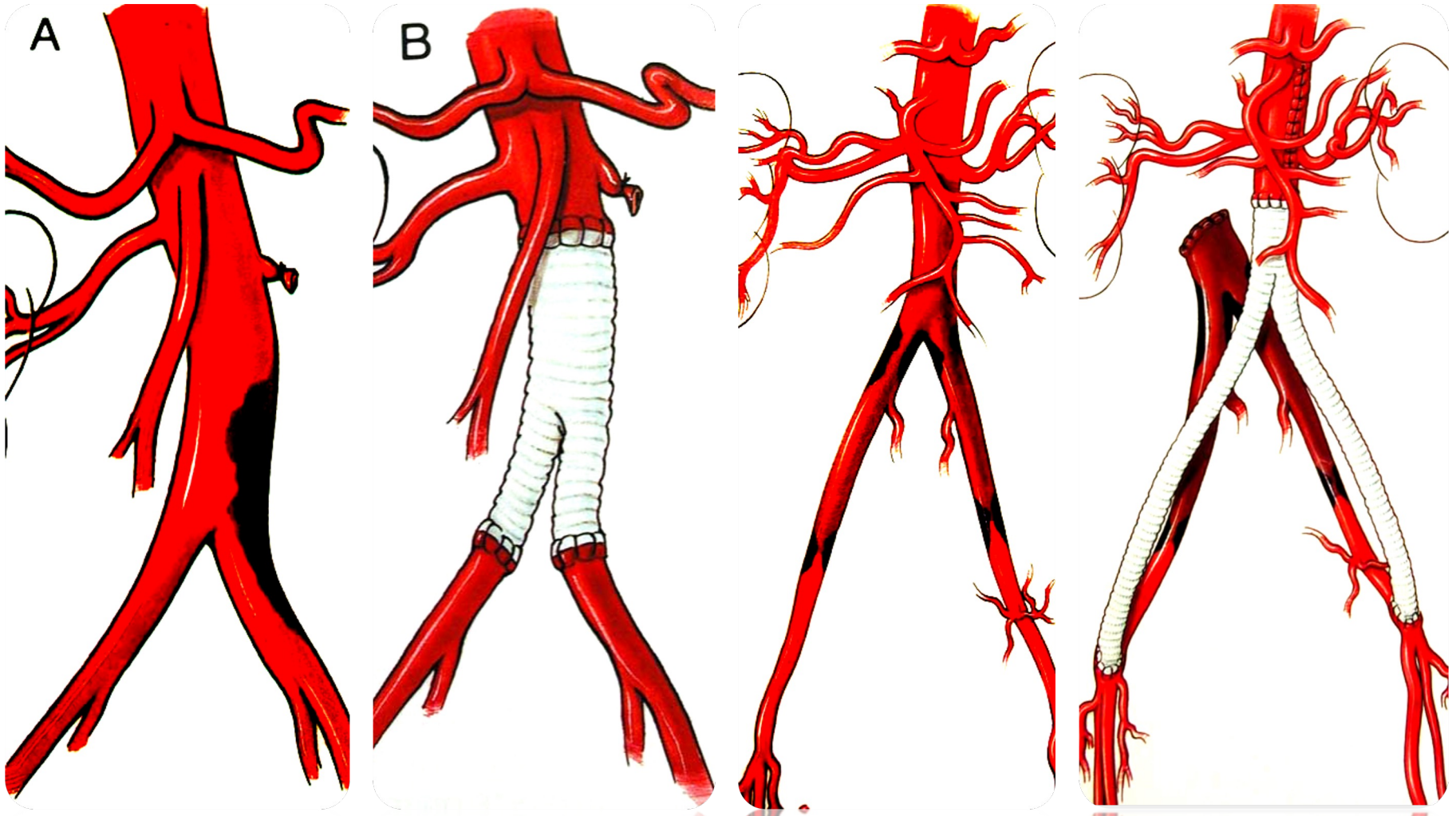
EndoLimb Rosario 2023

Tratamiento endovascular de la oclusión aortoiliaca

Dr. Martín Rabellino
Jefe del Servicio de Diagnóstico por Imágenes
Hospital Italiano de Buenos Aires

Opciones Quirúrgicas



Eur J Vasc Endovasc Surg. 2010 Apr;39(4):460-71. doi: 10.1016/j.ejvs.2009.12.014. Epub 2010 Mar 20.

Review of direct anatomical open surgical management of atherosclerotic aorto-iliac occlusive disease.

Chiu KW, Davies RS, Nightingale PG, Bradbury AW, Adam DJ.

University of Birmingham, Department of Vascular Surgery, Heart of England NHS Foundation Trust, Netherwood House, Solihull Hospital, Birmingham, UK.

29 estudios 5738 pacientes

	Mort	Morbi	Per 5 a
•By pass aorto-femoral	4.1%	16%	86.5%
•By pass ilio-femoral	2.7%	18.9%	85.3%
•Endarterectomia aortoiliaca	2.7%	12.7%	88.3%

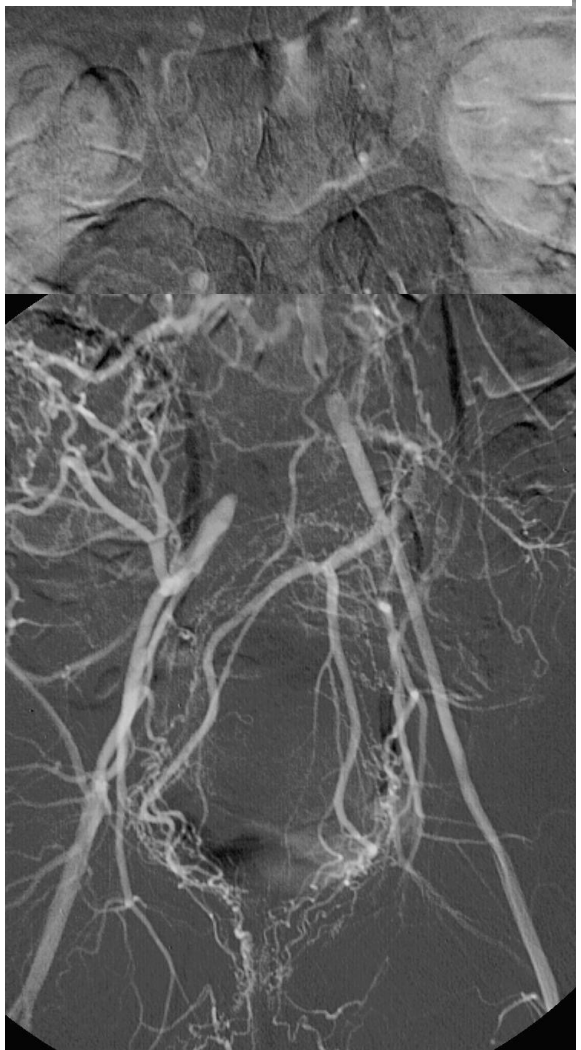
Lesiones aorto-iliacas TASC C-D

J Vasc Interv Radiol. 2011 Aug;22(8):1124-30. doi: 10.1016/j.jvir.2011.05.006.

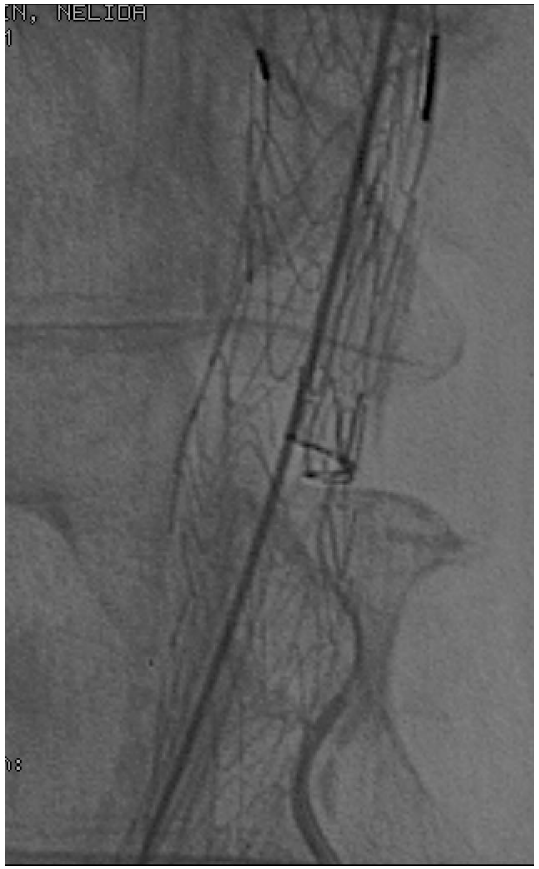
Bifurcated endograft in aortoiliac type C and D lesions: long-term results.

Zander T, Blasco O, Rabellino M, Baldi S, Sanabria E, Llorens R, Garcia L, Zerolo I, Maynar M.

Department of Endovascular Therapy, Hospital Hospiten Rambla, Rambla de Santa Cruz 115, 38001 Santa Cruz de Tenerife, Spain. tobiaszander@gmx.de



Lesiones aorto-iliacas TASC C-D



Diámetro aórtico19mm

Diámetro prótesis 24mm

Kissing balón 12 mm

J Vasc Interv Radiol. 2011 Aug;22(8):1124-30. doi: 10.1016/j.jvir.2011.05.006.

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Bifurcated endograft in aortoiliac type C and D lesions: long-term results.

2011

Zander T, Blasco O, Rabellino M, Baldi S, Sanabria E, Llorens R, Garcia L, Zerolo I, Maynar M.

Department of Endovascular Therapy, Hospital Hospiten Rambla, Rambla de Santa Cruz 115, 38001 Santa Cruz de Tenerife, Spain. tobiaszander@gmx.de

Treatment of Aortoiliac Occlusive Disease with the Endologix AFX Unibody Endograft.

2016

Maldonado TS, Westin GG, Jazaeri O, Mewissen M, Reijnen MM, Dwivedi AJ, Garrett HE Jr, Dias Perera A, Shimshak T, Mantese V, Smolock CJ, Arthurs ZM.

Eur J Vasc Endovasc Surg. 2016 Jul;52(1):64–74. doi: 10.1016/j.ejvs.2016.04.003. Epub 2016 May 6.

Covered endovascular reconstruction of aortic bifurcation (CERAB) technique: a new approach in treating extensive aortoiliac occlusive disease.

Goverde PC, Grimme FA, Verbruggen PJ, **Reijnen MM.**

2013

J Cardiovasc Surg (Torino). 2013 Jun;54(3):383–7.

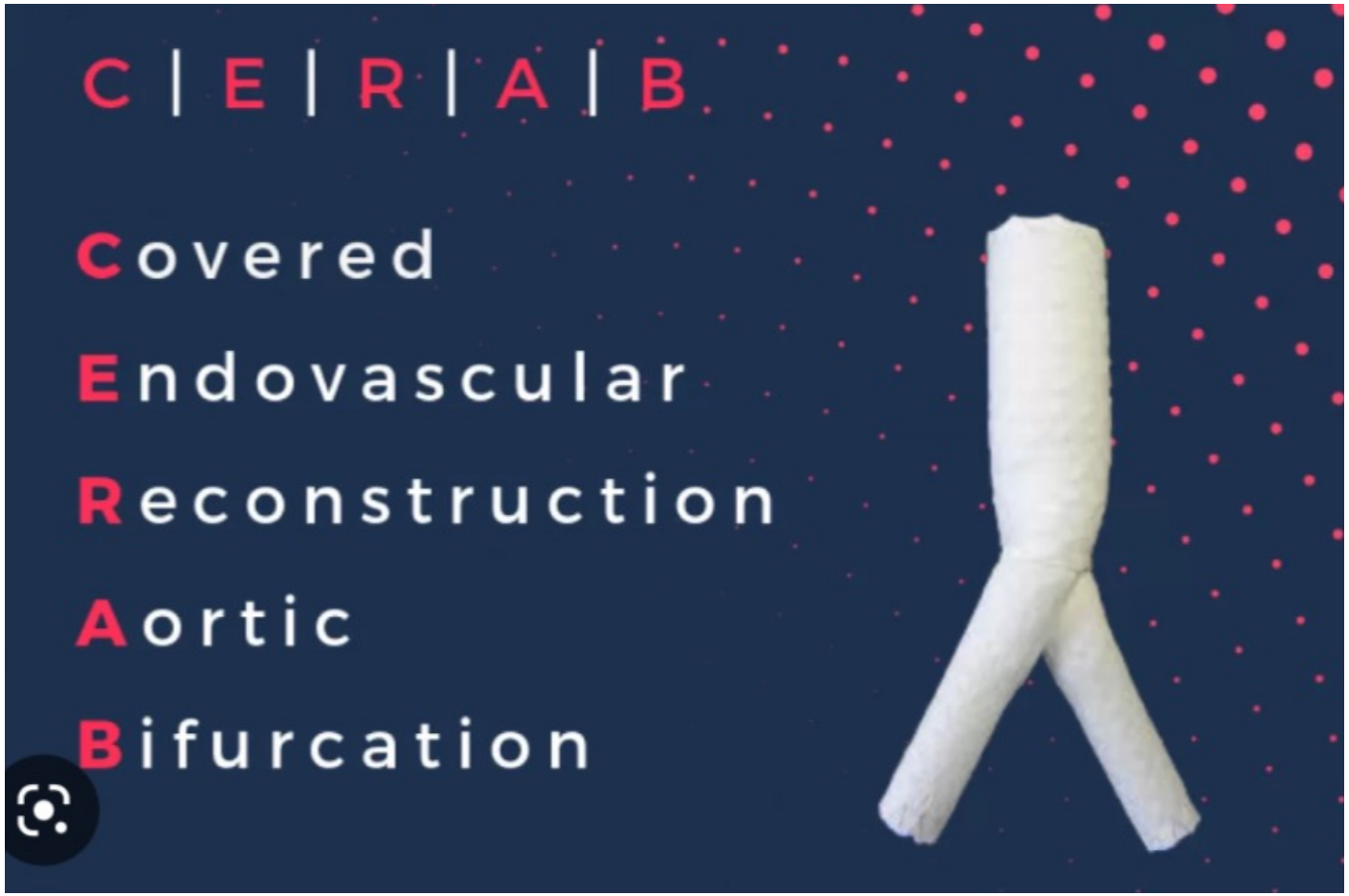
PMID: 23640357

Three-year outcome of the covered endovascular reconstruction of the aortic bifurcation technique for aortoiliac occlusive disease.

Taeymans K, Groot Jebbink E, Holewijn S, Martens JM, Versluis M, Goverde PCJM, **Reijnen MMPJ.**

J Vasc Surg. 2018 May;67(5):1438-1447. doi: 10.1016/j.jvs.2017.09.015. Epub 2017 Nov 21.

PMID: 29169878 **Free article.**



130 pacientes

Éxito técnico 97%

PP / PA / PS
1y: 86% / 91% / 97%
2-3y: 82% / 87% / 97%

Complicaciones mM 30 d
33% / 7%

Proponen una comparación entre ambas tecnicas

Three-year outcome of the covered enc

bifurcation technique for aortoiliac occl

Taeymans K, Groot Jebbink E, Holewijn S, Martens JM, Versluis M, Goverde PCJM, **Reijnen MMPJ.**

J Vasc Surg. 2018 May;67(5):1438-1447. doi: 10.1016/j.jvs.2017.09.015. Epub 2017 Nov 21.

PMID: 29169878 Free article.

fter Kissing Stent Treatment for

Groot Jebbink E, Holewijn S, Versluis M, Grimme F, Hinnen JW, Sixt S, Angle JF, Dorigo W, **Reijnen MMPJ.**

J Endovasc Ther. 2019 Feb;26(1):31-40. doi: 10.1177/1526602818810535. Epub 2018 Nov 30.

PP / PS
2 y: 82% / 87%

Complicaciones mM 30 d
33% / 7%

A partir de 2005 los resultado mejoran notablemente:

Experiencia y tecnología

Editor's Choice – Covered *vs.* Bare Metal Stents in the Reconstruction of the Aortic Bifurcation: Early and Midterm Outcomes from the COBRA European Multicentre Registry

Athanasios Saratzis [a,|], Angeliki Argyriou [b,|,*], Robert Davies [a], Theodosios Bisdas [b,c], Arindam Chaudhuri [d], Giovanni Torsello [b], Konstantinos Stavroulakis [b,e,†], Hany Zayed [f,†], The COBRA collaborative [§]

[a] Leicester Vascular Institute, University Hospitals of Leicester NHS Trust, UK
[b] Department of Vascular and Endovascular Surgery, St. Franziskus Hospital Muenster, Germany
[c] Department of Vascular and Endovascular Surgery, Athens Medical Centre, Greece
[d] Department of Vascular Surgery, Bedford Hospital NHS Trust, UK
[e] Department of Vascular Surgery, Ludwig-Maximilians-University Hospital Munich, Germany
[f] Department of Vascular Surgery, Guy's and St. Thomas' NHS Foundation Trust, UK

WHAT THIS PAPER ADDS

This is the first international multicentre study reporting mediu
complex endovascular reconstruction for severe aorto-iliac occlusive
stents. The study showed comparable outcomes between patients tr
use of both aortic and iliac covered stents might be associated w
multivariable model.

Objective: To report outcomes following endovascular revascularisation for severe aorto-iliac occlusive disease (AIOD) using covered (CS) or bare metal (BMS) stent(s).

Methods: This was a retrospective cohort study including patients who under
AIOD between November 2012 and March 2020 in 12 European centres. C
freedom from target lesion revascularisation (TLR), major amputation,
cerebrovascular events (MACCE).

Results: Overall, 252 patients (53% males; mean age 65 ± 10 years) were in
150 with a covered aortic stent); 122 (48%) presented with chronic limb th
arterial calcification was noted in > 65% of patients, 70% presented with
(TASC) D lesions, 32% and 46% had aortic or iliac chronic total occlusion
up was 17 months (range 6 – 40; none lost to follow up). Median inpatien
four). During the first 30 days, two patients died (both with covered aortic
events), none required TLR, two (1%) patients had a major amputation (a
(1%) had a MACCE. At 17 months, mortality (BMS 14% *vs.* CS 7%, hazard
interval [CI] 0.42 – 2.26, $p = .94$, log rank test) and TLR (11% *vs.* 10%, H
.095) did not differ statistically significantly between the two groups; only
amputation during late follow up (all with a covered stent). In a multivarial
did not influence TLR. In a conditional Cox regression, however, the concc
was associated with improved freedom from TLR.

Conclusion: Endovascular reconstruction with aortic CSs or BMSs for severe
performance. The use of both aortic and iliac CSs seems to be associated w

Keywords: Aorto-iliac disease, Chronic limb threatening ischaemia, Claudication, Endovascular, Peri
Article history: Received 1 December 2020, Accepted 4 December 2021, Available online 22 March

Conclusion: Endovascular reconstruction with aortic CSs or BMSs for severe AIOD showed comparable midterm performance. The use of both aortic and iliac CSs seems to be associated with reduced TLR.

Table 3. Post-operative adverse events at 30 days for all 252 patients, and 102 patients in the bare metal stent and 150 patients in the covered stent group, for reconstruction of the aortic bifurcation for aorto-iliac occlusive disease

Events	All patients ($n = 252$)	Bare metal stents ($n = 102$)	Covered stents ($n = 150$)	p value
Death	2 (1)	0 (0)	2 (1)	–
Target lesion revascularisation	0 (0)	0 (0)	0 (0)	.24
Major lower limb amputation	2 (1)	0 (0)	2 (1)	–
Major adverse cardiac event	3 (1)	1 (1)	2 (1)	.24
Access site complications	22 (9)	8 (8)	14 (9)	.79
Acute kidney injury	8 (3)	2 (2)	6 (4)	.68
Aortic rupture, intra-operative	2 (1)	0 (0)	2 (1)	.47
Stroke	1 (0.4)	1 (1)	0 (0)	.24

Data are presented as *n* (%). AKI = Acute Kidney Injury – defined as per the Kidney Disease Improving Global Outcomes (KDIGO) Consortium, using serum creatinine measurements.

COMUNICACIÓN BREVE

Tratamiento endovascular en oclusiones aortoilíacas

Endovascular Treatment in Aortoiliac Occlusive Disease

MARTÍN RABELLINO[1], JOSÉ CHAS[1-3], LUCIANO LUCAS[2], VICENTE CESÁREO[3], VADIM KOTOWICZ[3], RICARDO GARCÍA-MÓNACO[1]

RESUMEN

Introducción: La cirugía representa el tratamiento de revascularización tradicional para las lesiones aortoilíacas TASC tipos C y D. No obstante, la morbimortalidad de la cirugía abierta no es despreciable, motivo por el cual en la última década el tratamiento endovascular emerge como una alternativa menos invasiva.
Objetivo: Analizar los resultados en nuestra institución del tratamiento endovascular de estas lesiones ilíacas con técnica de *stent* primario.
Material y métodos: Se realizó un análisis retrospectivo descriptivo de 32 lesiones ilíacas TASC tipos C y D tratadas de forma endovascular desde enero de 2012 a octubre de 2014. Se evaluaron el éxito técnico, la mortalidad perioperatoria y la permeabilidad.
Resultados: Se consiguió el éxito técnico en las 32 (100%) lesiones tratadas. La media de seguimiento fue de 14 meses, con una permeabilidad primaria del 96,8%. La mortalidad acumulativa durante el seguimiento fue de 2 (6,25%) pacientes.
Conclusiones: En nuestra experiencia, en las lesiones TASC tipos C y D de la región aortoilíaca, el tratamiento endovascular es factible y seguro y presenta una tasa elevada de recanalización. Podría considerarse como una alternativa válida a la cirugía para este tipo de lesiones si estos hallazgos se confirman en estudios de mayores dimensiones, aleatorizados y comparativos de ambas terapéuticas.

Palabras clave: Isquemia arteria iliaca/patología - Procedimientos endovasculares - *Stents* - Arteriopatías oclusivas

ABSTRACT

Background: Open surgery is the traditional treatment of aortoiliac TASC type C and D lesions. However, as morbidity and mortality rates of open surgery are not negligible, endovascular treatment has emerged as a less invasive option over the last decade.
Objective: The aim of this study is to analyze our results with endovascular treatment of these iliac lesions using the primary stenting technique.
Methods: We performed a retrospective and descriptive analysis of 32 endovascular interventions for TASC C-D lesions performed from January 2012 to October 2014 to evaluate technical success, perioperative mortality and patency.
Results: Technical success was achieved in the 32 (100%) lesions treated. Primary patency was 96.8% after a mean follow-up of 14 months. Cumulative mortality was 6.25% (2 patients) during follow-up.
Conclusions: In our experience, endovascular treatment of aortoiliac TASC type C and D lesions is a feasible and safe procedure with a high recanalization rate. Endovascular treatment of this type of lesions could be considered a valid option if these findings are confirmed in large randomized controlled trials comparing this strategy with surgery.

Key words: Ischemia Iliac Artery/pathology - Endovascular Procedures - Stents - Arterial Occlusive Diseases

Rev Argent Cardiol. 2016;84:250-253. http://dx.doi.org/10.7775/rac.v84.i3.5692

Recibido: 18/11/2015 - *Aceptado*: 07/01/2016

Por que?

< tasa de complicaciones

Mas simple y reproducible

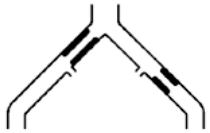
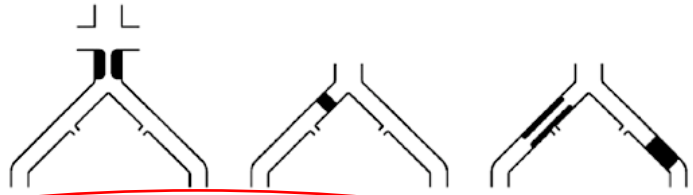
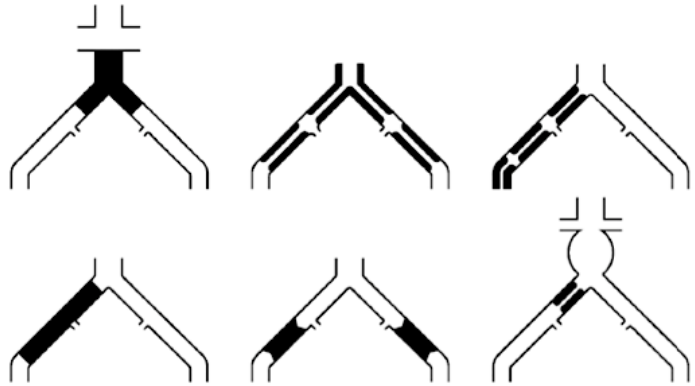
Accesos: 5-6 Fr

Menor costo

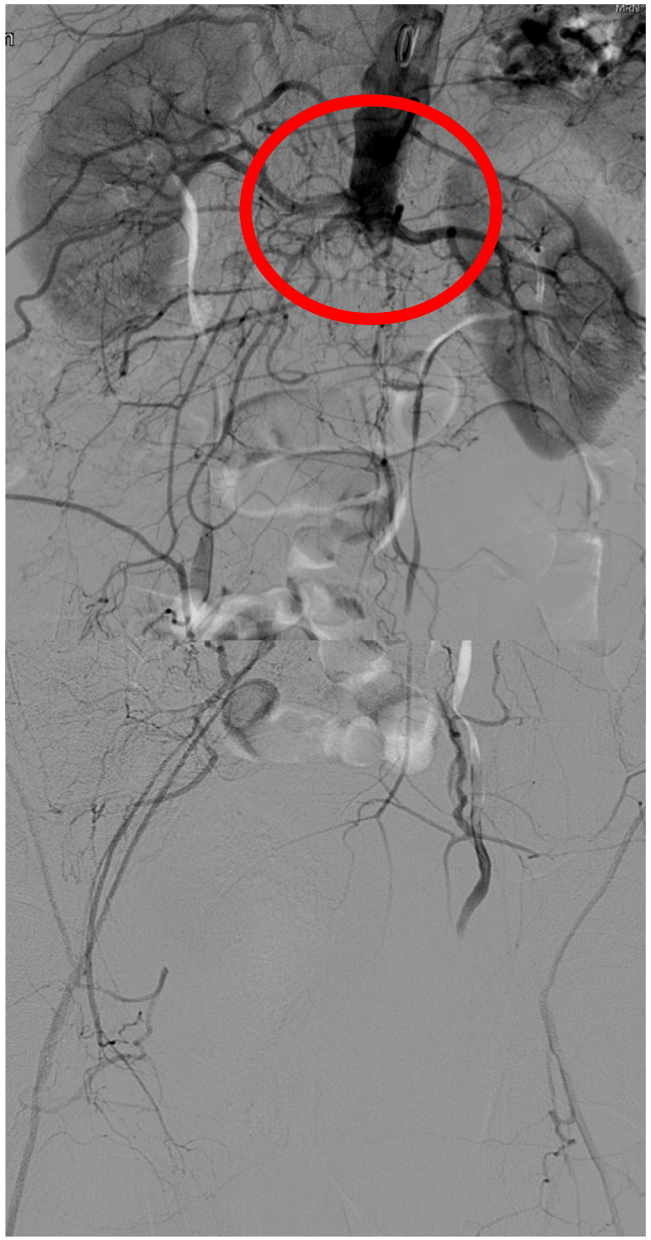
15 años de experiencia

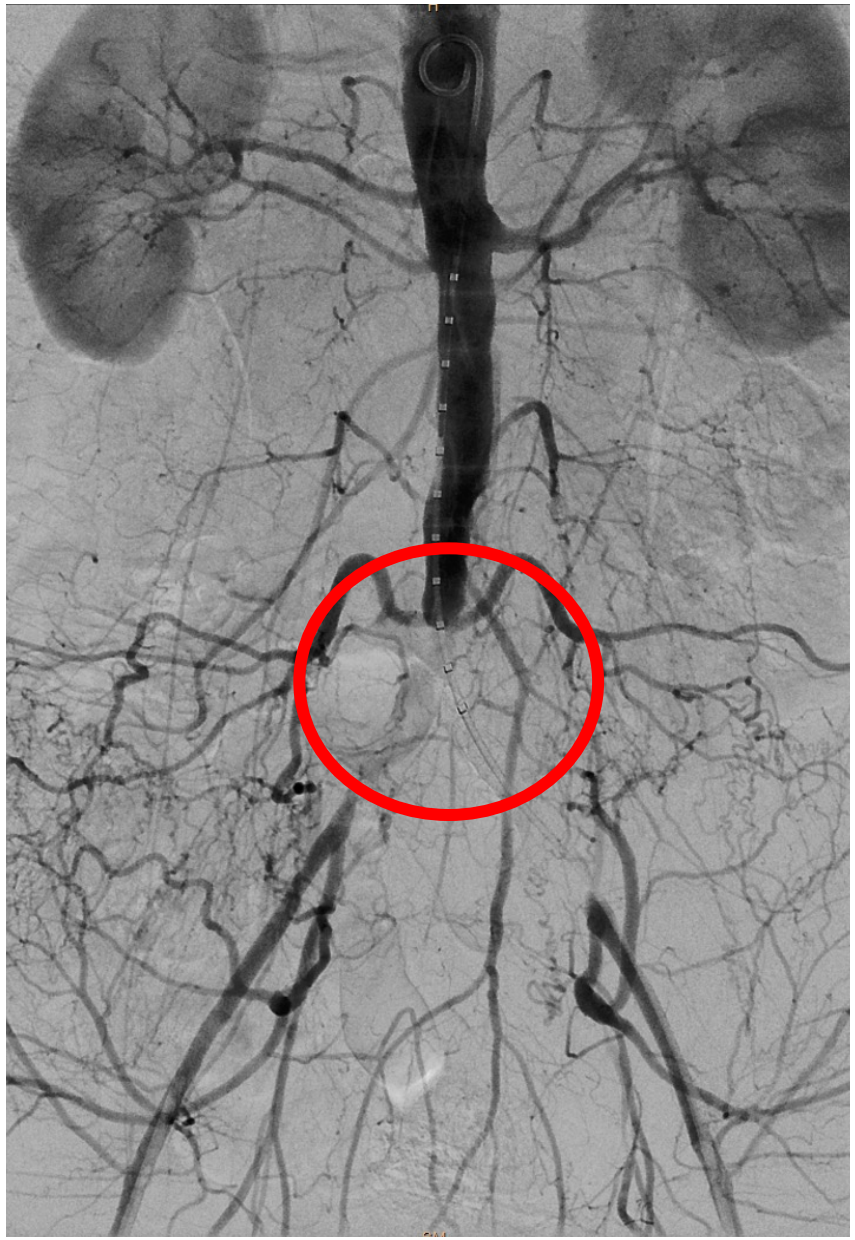
Buenos resultados

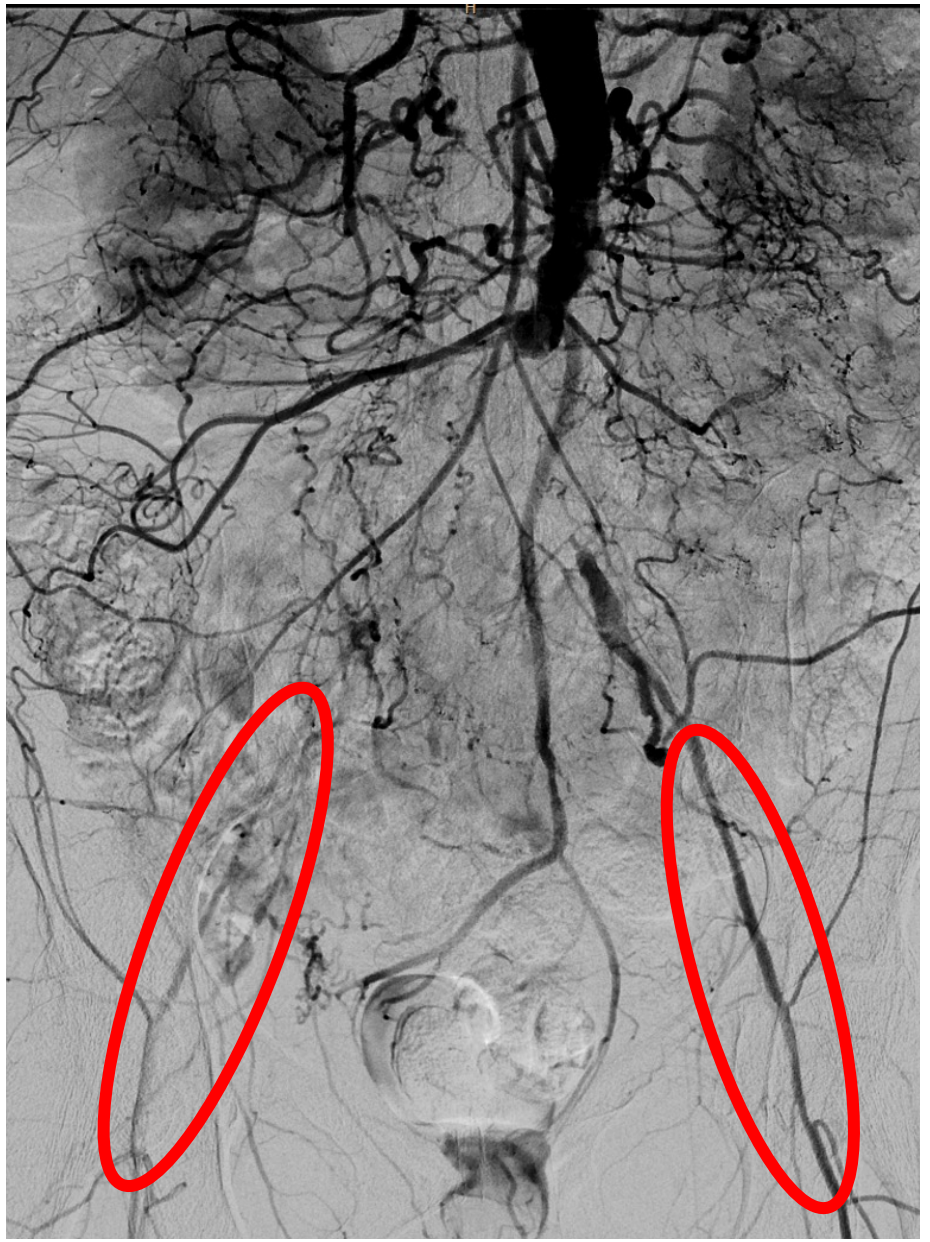
Tener siempre un stent cubierto

TASC A lesions • Unilateral or bilateral CIA stenoses • Unilateral or bilateral single short (≤3 cm) EIA stenosis	
TASC B lesions • Short (≤3 cm) stenosis of the infrarenal aorta • Unilateral CIA occlusion • Single or multiple stenosis totaling 3 to 10 cm involving the EIA not extending into the CFA • Unilateral EIA occlusion not involving the origins of the internal iliac or CFA	
TASC C lesions • Bilateral CIA occlusions • Bilateral EIA stenoses 3 to 10 cm long not extending into the CFA • Unilateral EIA stenosis extending into the CFA • Unilateral EIA occlusion involving the origins of the internal iliac and/or CFA • Heavily calcified unilateral EIA occlusion with or without involvement of the origins of the internal iliac and/or CFA	
TASC D lesions • Infrarenal aortoiliac occlusion • Diffuse disease involving the aorta and both iliac arteries • Diffuse multiple stenoses involving the unilateral CIA, EIA, and CFA • Unilateral occlusions of both CIA and EIA • Bilateral EIA occlusions • Iliac stenoses in patients with AAA not amenable to endograft placement	

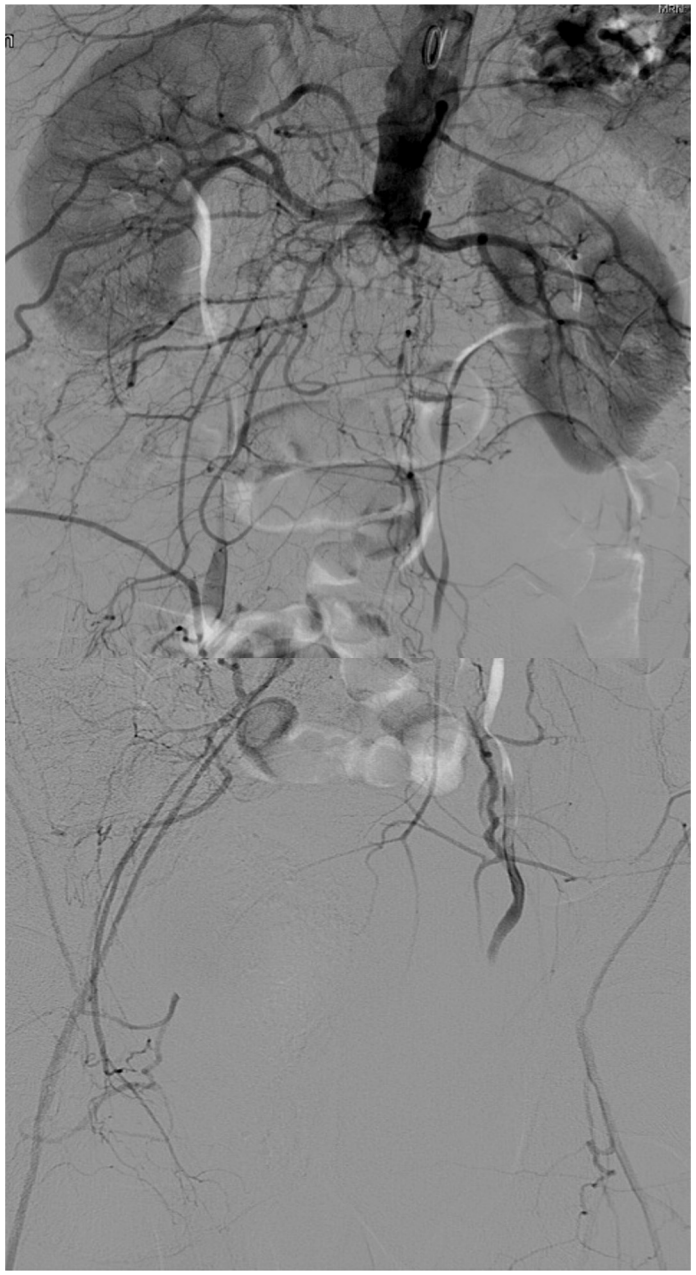
Escenarios

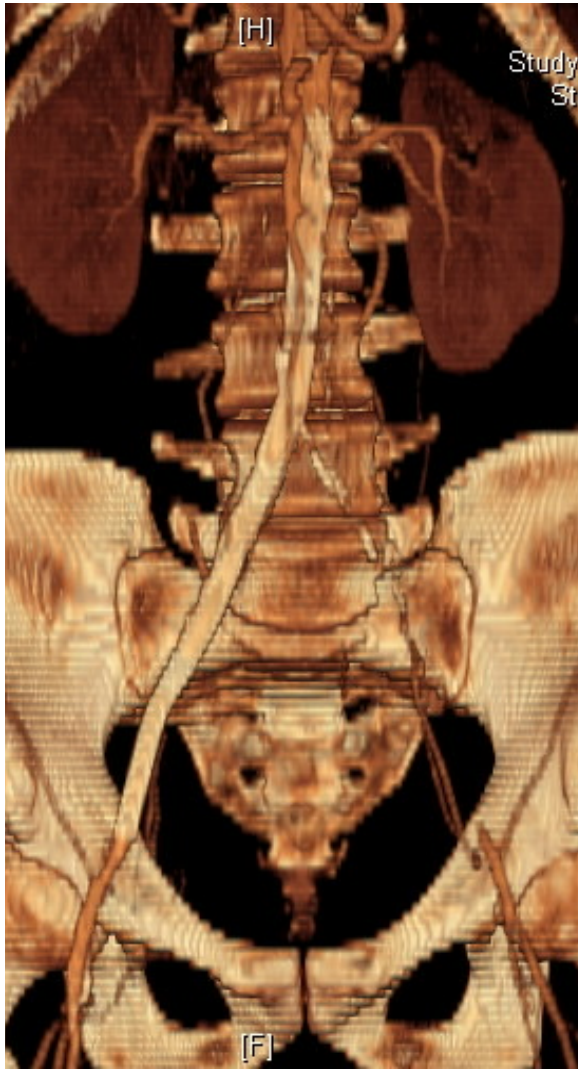


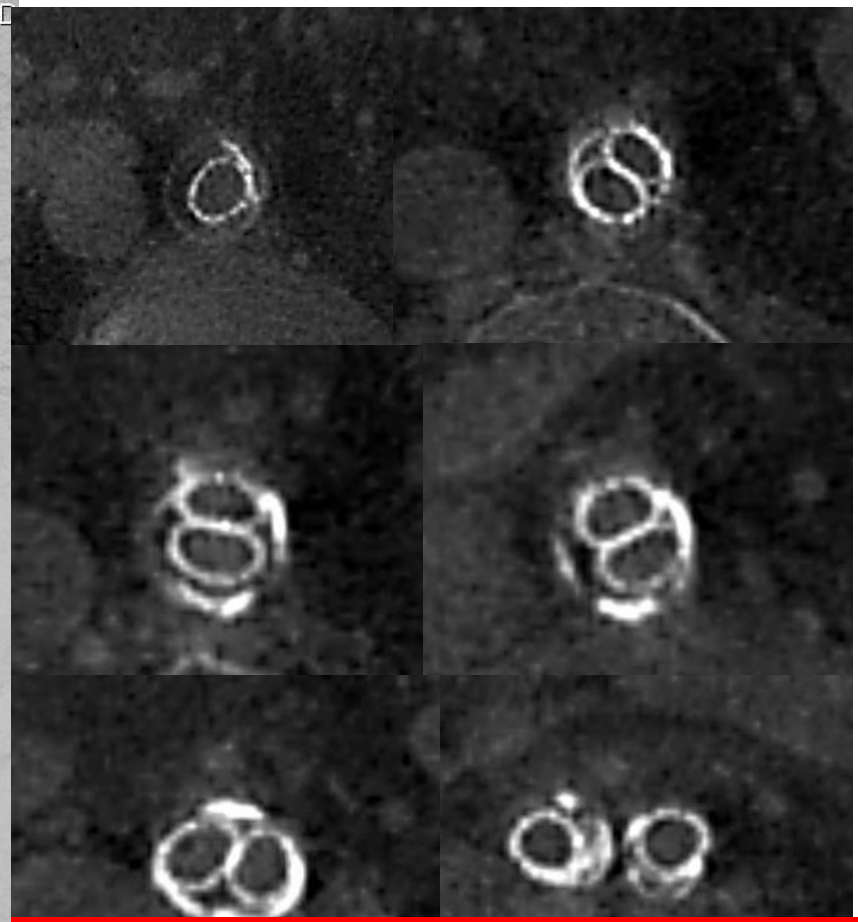




Primer caso año 2007



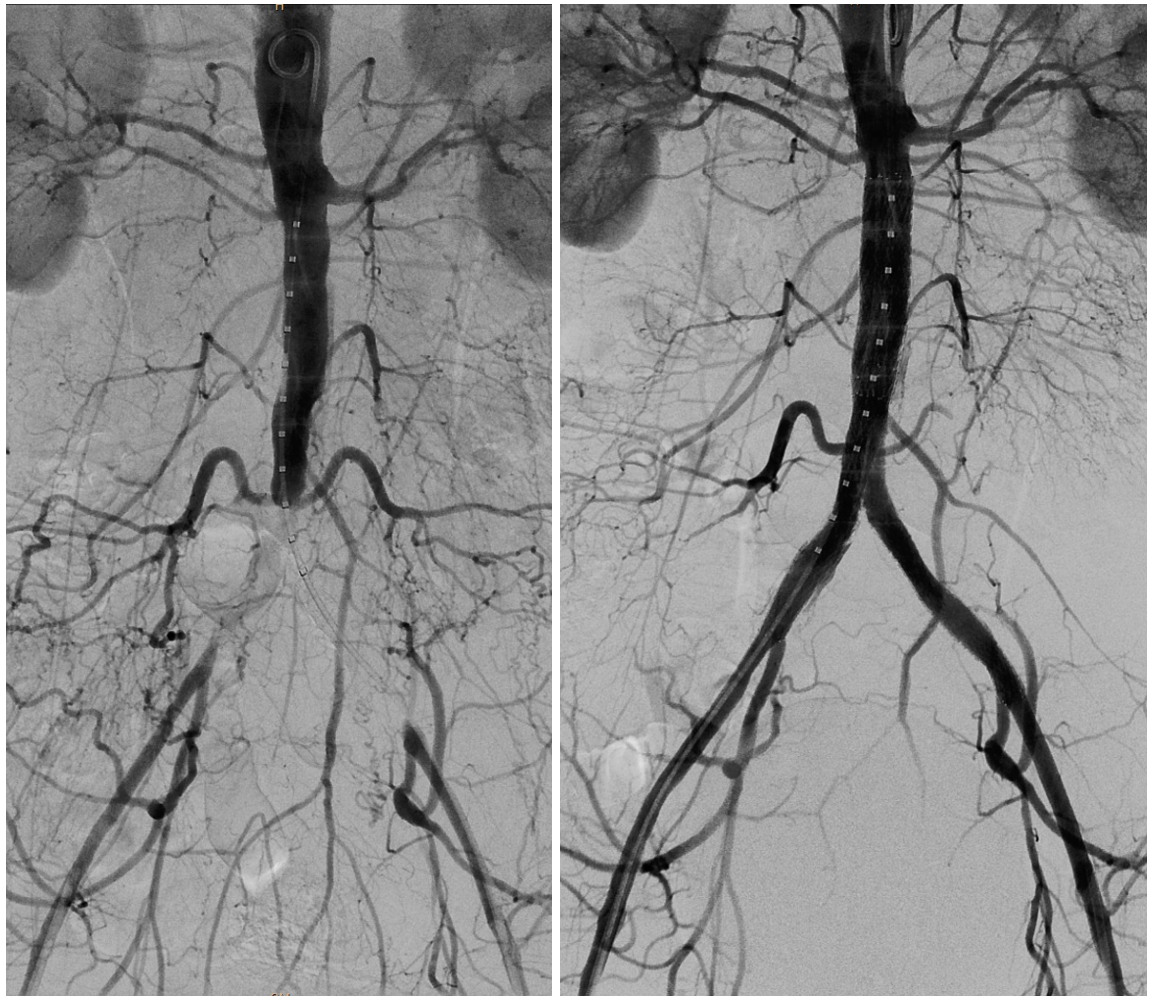




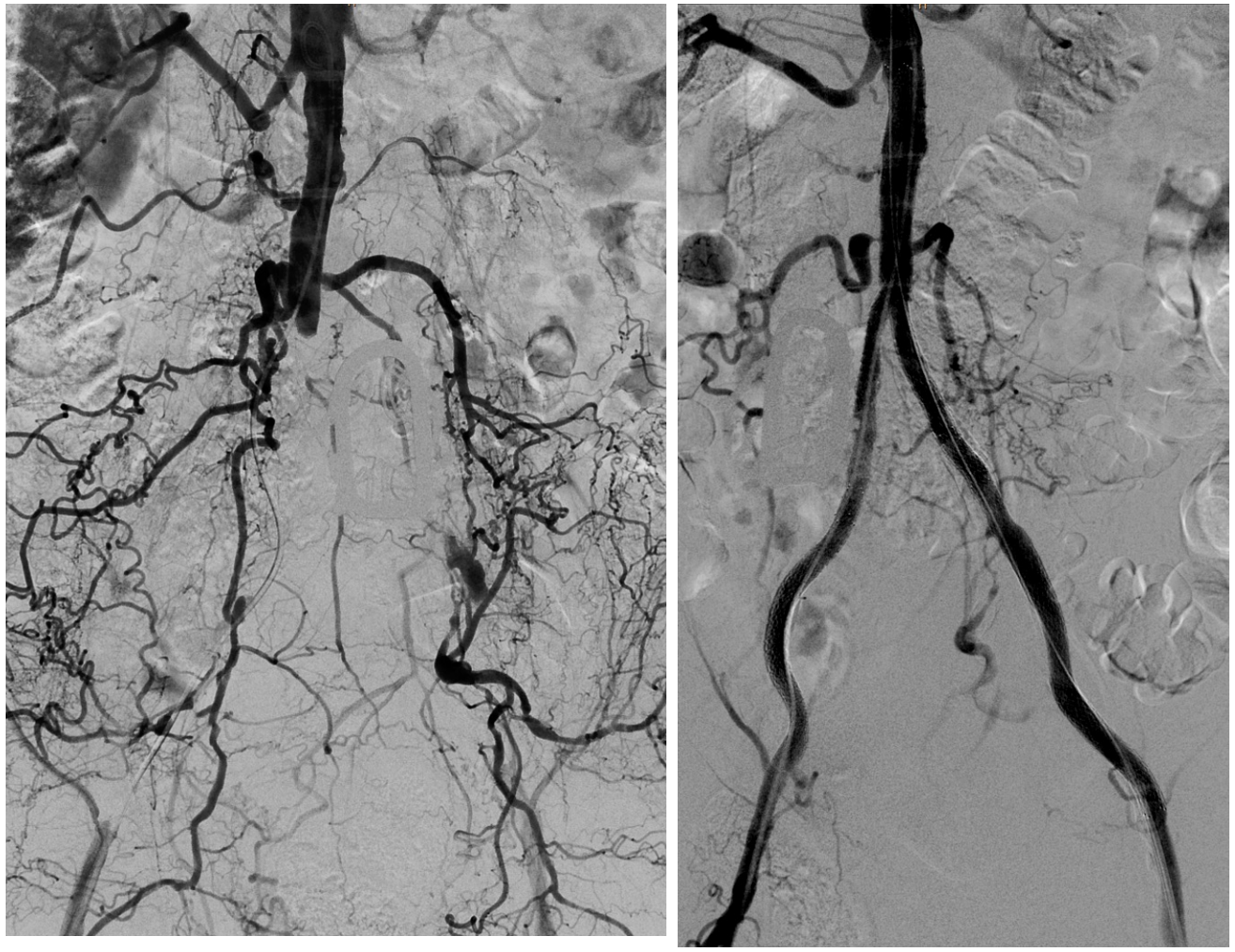
DynaCT

Técnica

uCERAB



Caño de escopeta



Resumen de HC

- F 82 años. Ingresa por guardia con cuadro de isquemia aguda de MII de 12 hs de evolución.

- Antecedentes: tabaquismo activo, dislipemia, EPOC y arteriopatia periférica en MII en estudio.

- Examen físico: Ausencia de pulsos en ambos MMII con palidez y frialdad a predominio derecho

Resumen de HC

- Laboratorio de ingreso: CPK 3200, creatininemia normal, resto S/P.

- Ecodoppler color: Onda monofásica desde femoral común inclusive

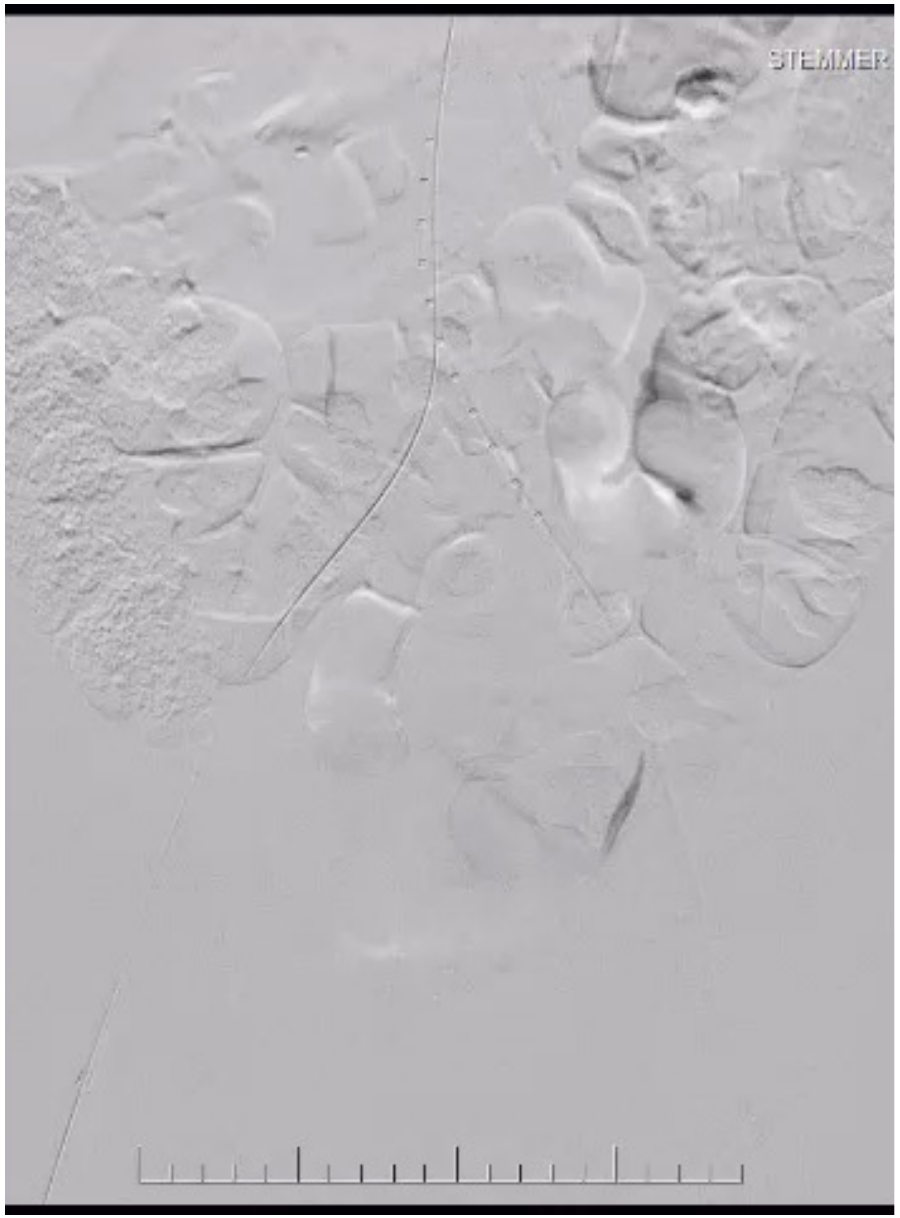
?

CX

Endo

Hibrido

Caso clínico: Síndrome de Leriche



Evolución

- No se presentan complicaciones relacionadas a la intervención
- Recupera pulsos en ambas extremidades así como color y temperatura
- Alta a las 24 hs
- Creatininemia normal

Conclusión

El tratamiento endovascular debería considerarse de primera elección

Paciente joven sin comorbilidades con oclusión yuxtarenal cirugía?

No hay evidencia pesada que justifique una u otra técnica endovascular. CERAB es la mas utilizada en la actualidad

Deberían tenerse resultados según tipo de lesiones