


**Long-Term Outcomes Of The CERAB Technique In Patients With Aortoiliac Occlusive Disease: Advantages, Limitations, And Stent-Graft Choice: How Can CERAB Be Used To Treat Juxtarenal Occlusions**

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**Disclosures**


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**Kissing stent configuration**

- Meta-analysis on 605 patients:
  - 81% primary patency at 2-year
  - 84% intermittent claudication
  - 53% TASC A & B
- Patency is affected by geometry:
  - Radial mismatch
  - Differences in stent conformation
  - The protrusion of the stents in the distal aorta

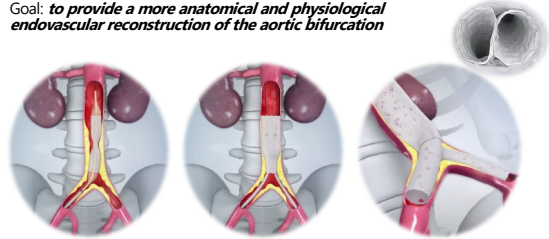



Verha M, et al. J Endovasc Ther. 2018 Oct;25(5):622-633  
Groot labadie, et al. J Endovasc Ther. 2019 Feb;26(1):37-49




**Covered Endovascular Reconstruction of the Aortic Bifurcation - CERAB**

Goal: *to provide a more anatomical and physiological endovascular reconstruction of the aortic bifurcation*


**CERAB**  
*Laser Particle Image Velocimetry*



*CERAB and BM kissing stents; Mostly laminar flow throughout the cardiac cycle*

*BM Kissing stents; turbulence and recirculation at phases B and C*

van den Bogaert E, et al. J Vasc. Sci. 2017; 1(6):271-280



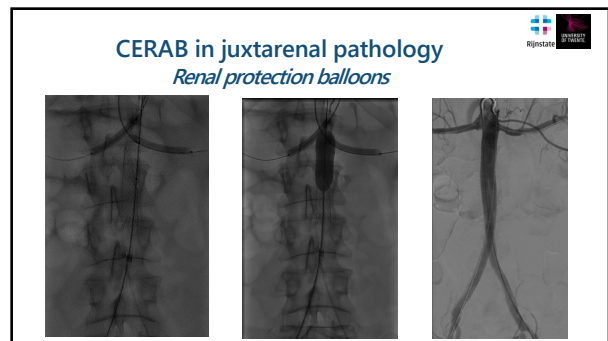
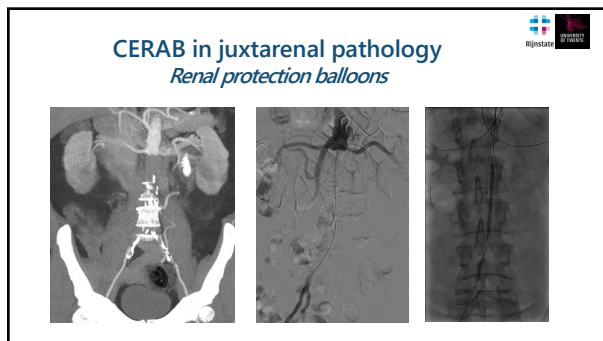
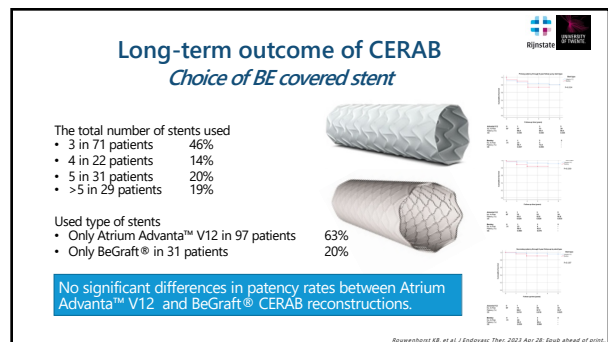
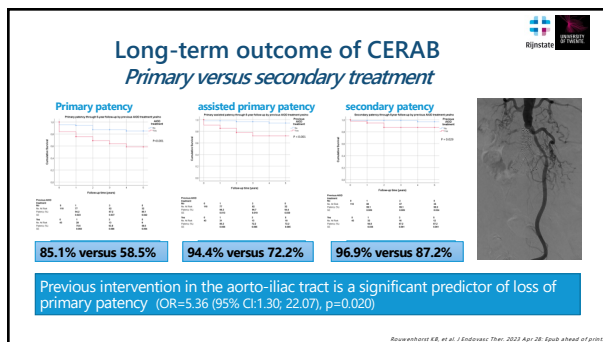
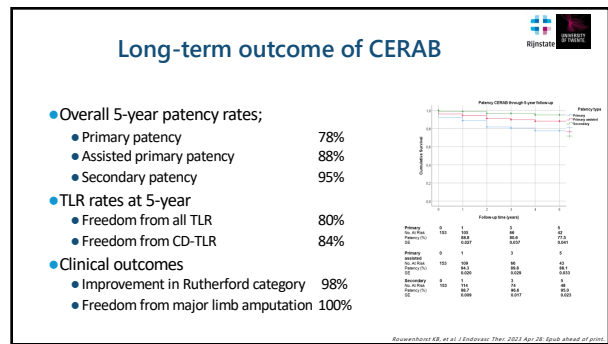
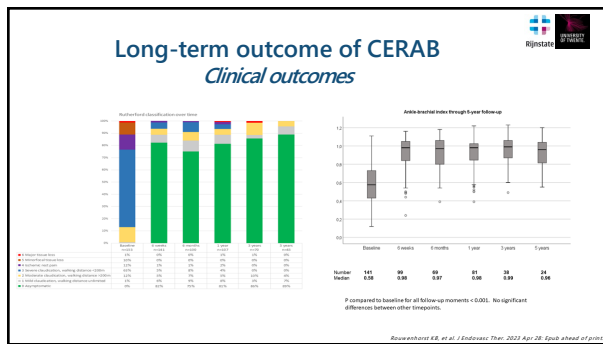
**Long-term outcome of CERAB**

- October 2010 – May 2020
- 160 elective patients
- Age 62 ± 10 years, 79 male
- Chimney and acute procedures excluded
- Previous intervention for AIOD in 63 patients (28%)
  - 76.3% endovascular
- Technical success 96%

Rutherford classification:		
1	n=1	0.6%
2	n=19	11.9%
3	n=101	63.1%
4	n=20	12.5%
5	n=17	10.6%
6	n=2	1.3%



TASC-II classification:		
A	n=1	(0.6%)
B	n=24	(8.8%)
C	n=129	(79.6%)
D	n=133	(83.1%)

Roovershorst KB, et al. J Endovasc Ther. 2023 Apr;30. Spub ahead of print.



## CERAB in juxtarenal pathology *Chimney procedures*

- 14 consecutive patients in three centers
- 11 male with mean age 61.2±8.9 years
- 12/14 TASC D lesions
- 15 chimney grafts
  - inferior mesenteric artery (n=8)
  - right renal artery (n=4)
  - left renal artery (n=3)
- Technical success 100%
- Follow-up; 12 months (range 6–24)
- Patency
  - CERAB 100%
  - Chimney 93%

Dijkster M, et al. J Endovasc Ther 2017 Feb;24(1):19-24.

## Summary

- Clinical and technical outcomes of CERAB are good through 5-year follow-up, and the technique can also be performed safely in juxtarenal pathology
- Previous aorto-iliac treatment is an independent risk factor for loss of patency after CERAB
- Different balloon-expandable stents seem to provide comparable outcomes






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