



Midterm outcome of the Covered Endovascular Reconstruction of the Aortic Bifurcation (CERAB) technique for aortoiliac occlusive disease

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Disclosure

Speaker name:

Kim Taeymans

I have the following potential conflicts of interest to report:

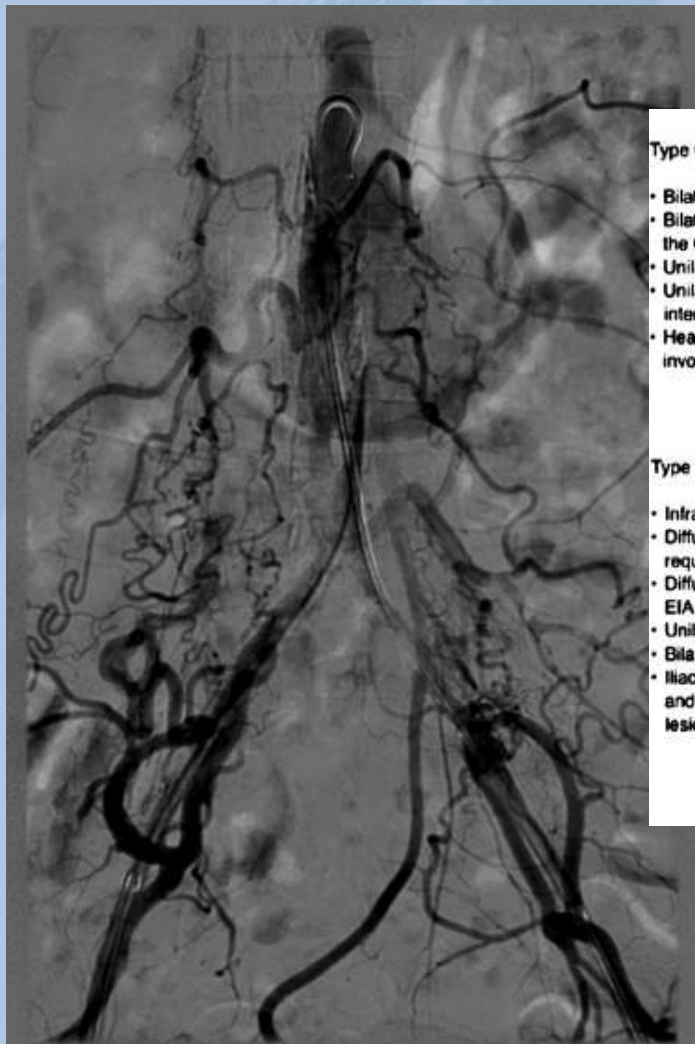
- ✓ I do not have any potential conflict of interest



INTRODUCTION



Aorto-iliac occlusive disease



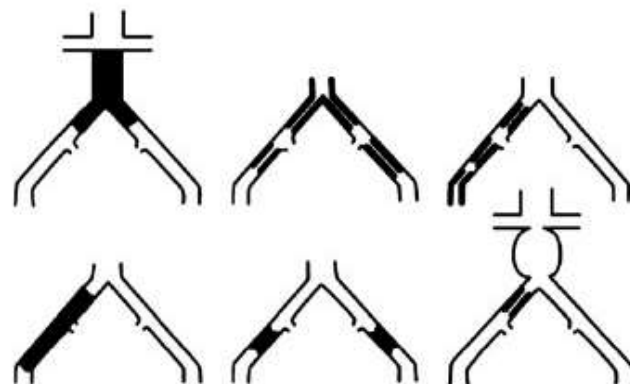
Type C lesions

- Bilateral CIA occlusions
- Bilateral EIA stenoses 3–10 cm long not extending into the CFA
- Unilateral EIA stenosis extending into the CFA
- Unilateral EIA occlusion that involves the origins of internal iliac and/or CFA
- Heavily calcified unilateral EIA occlusion with or without involvement of origins of internal iliac and/or CFA



Type D lesions

- Infra-renal aortoiliac occlusion
- Diffuse disease involving the aorta and both iliac arteries requiring treatment
- Diffuse multiple stenoses involving the unilateral CIA, EIA, and CFA
- Unilateral occlusions of both CIA and EIA
- Bilateral occlusions of EIA
- Iliac stenoses in patients with AAA requiring treatment and not amenable to endograft placement or other lesions requiring open aortic or iliac surgery





Covered Endovascular Reconstruction Aortic Bifurcation

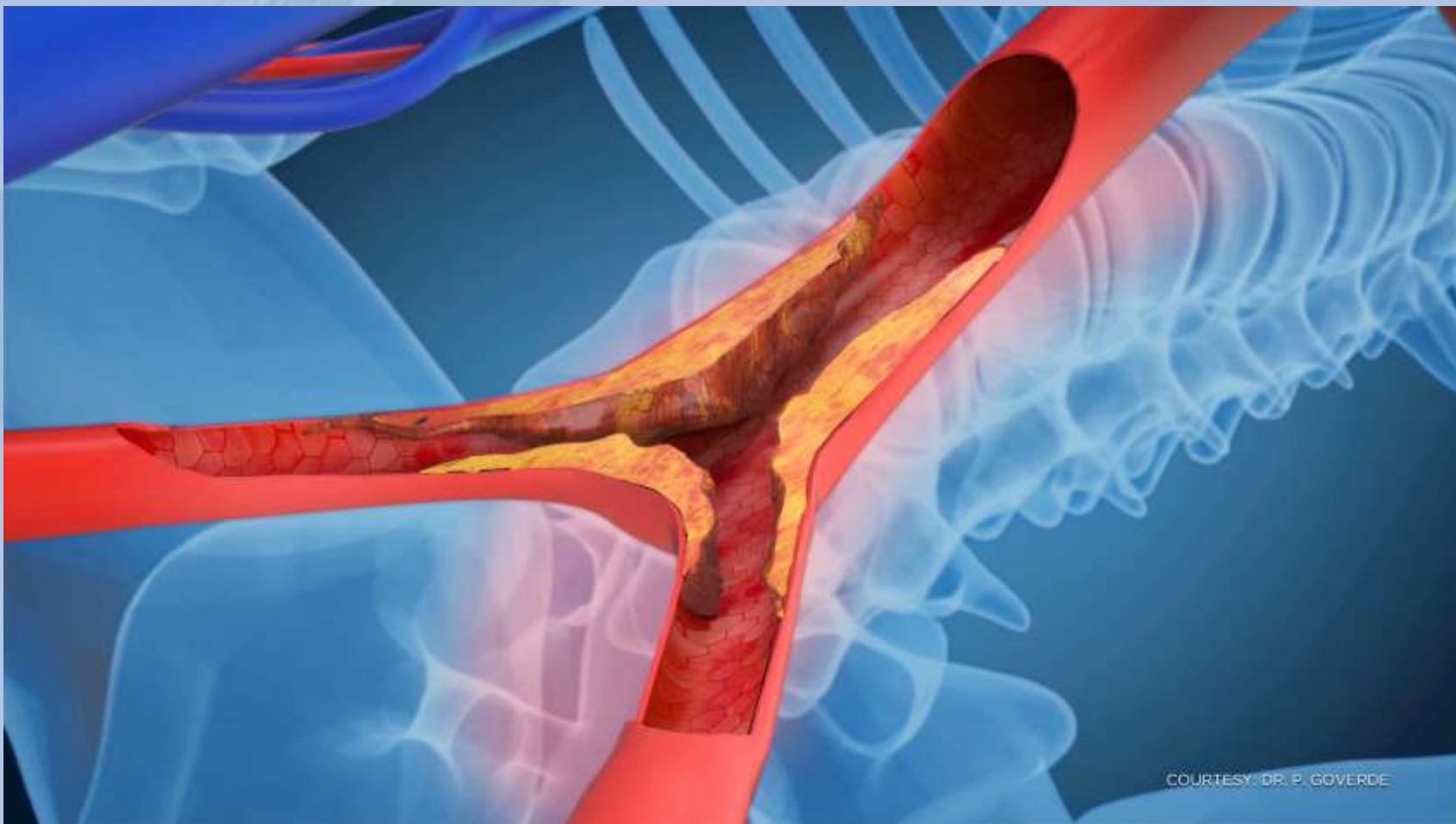


[J Cardiovasc Surg \(Torino\)](#), 2013 Jun;54(3):383-7.

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

[Goverde PC](#)¹, [Grimme FA](#), [Verbruggen PJ](#), [Reijnen MM](#).

CERAB



COURTESY: DR. P. GOVERDE



Patients

- 130 patients
- Treated between February 2009 – July 2016
- In 2 hospitals
 - Rijnstate Arnhem (Netherlands)
 - ZNA Vascular Clinic (Belgium)
- Retrospective analysis



Follow up

- Clinical assessment
- Duplex ultrasound
- ABI



RESULTS



Patients (n = 130)		
	Mean (range)	
Age	61.0 (36-81)	
	N	%
Men	69	53.1
TASC II - D		89,2
Risk factors		
Current smoking	100	78.1
Diabetes mellitus	46	35.4
Hypertension	96	73.8
Hyperlipidemia	121	93.1
Cardiac disease	61	46.9
Pulmonary disease	51	39.2
Carotid disease	26	20.2
Renal disease	25	19.2
Rutherford category		
1	1	0.8
2	0	0
3	84	66.1
4	22	17.3
5	18	14.2
6	2	1.6



Procedural results

Technical success rate	96,9 %
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Access	n	%
Percutaneous	n=87	66.9%
Open	n=20	15.4%
Open + percutaneous	N=23	17.7%

Procedural complications	n
Dissection	6
Bleeding	2
Rupture	2
Dislocation of stent	1
Stent deformation	1
Thrombus formation	2



Clinical outcome

- Minor complications 33.1%
 - Hematoma , ecchymosis, leg edema, false aneurysm
- Major complications 7.7 %
 - Stent collapse
 - Occlusion AFC (closure device)
 - Thrombosis
 - Acute on chronic renal insufficiency

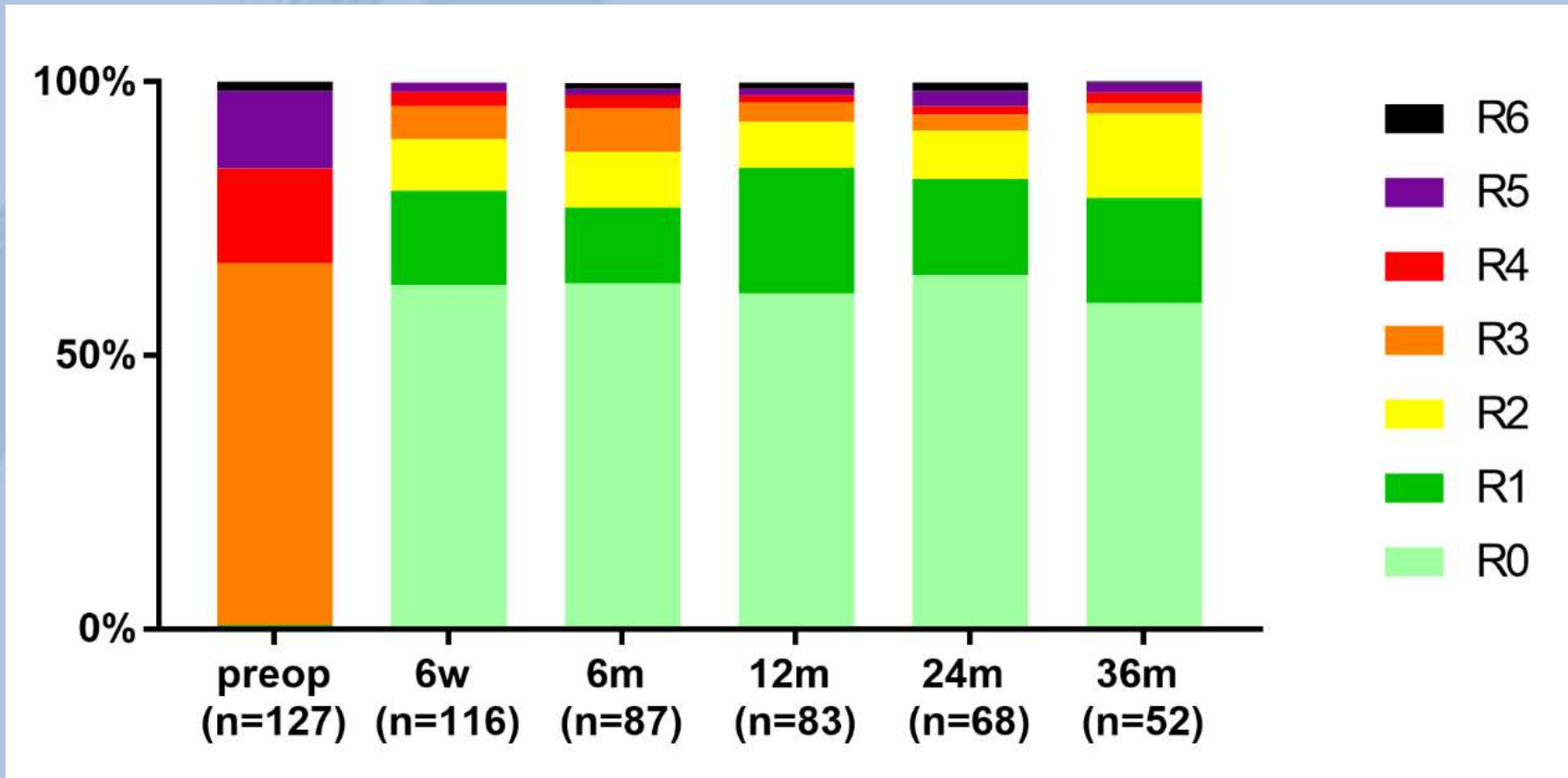


Clinical outcome

- 30 day mortality 0 %
- Hospital stay
 - 54.1 % → 1-2 days
 - 29.5% → 3-5 days



Rutherford category



→ Median preoperatively : 3 , median after 24 and 36 months 0

ABI



Preop

Postop

24 months

36 months

0.65

+/- 0.22

0.88

+/- 0.15

0.97

+/- 0.14

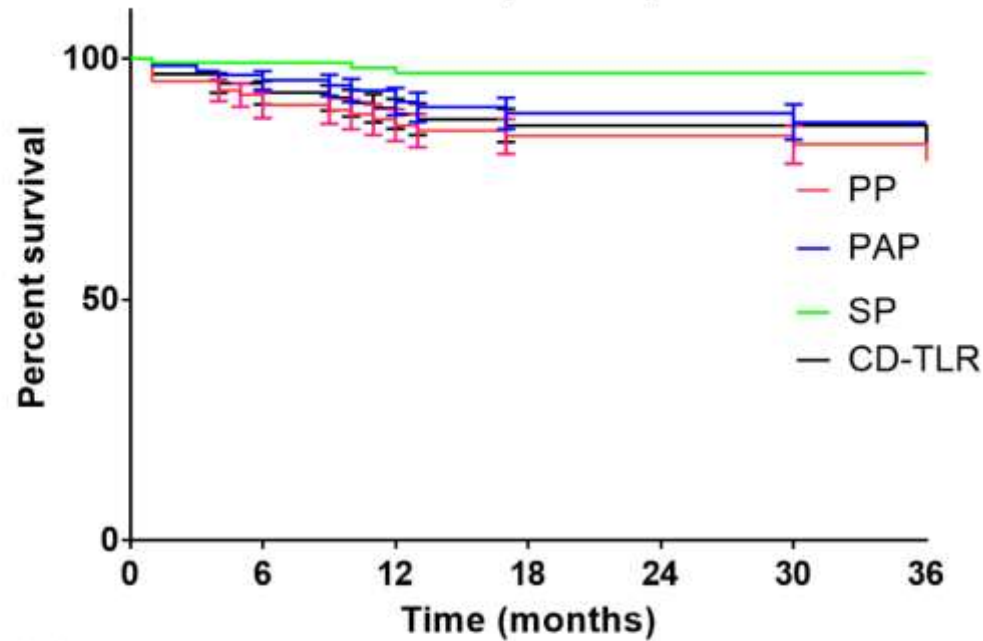
0.99

+/- 0.14

Patency



Calculated patency rates



	0	6	12	18	24	30	36
Primary patency (PP)							
No. At Risk	126	91	79	69	56	47	37
Patency (%)	100	90.4	86.2	83.9	83.9	82.1	82.1
SE (%)	0.0	2.8	3.3	3.6	3.6	4.0	4.0
Prim. Ass. Patency (PAP)							
No. At Risk	126	95	82	70	57	48	38
Patency (%)	100	95.5	91.1	88.7	88.7	86.8	86.8
SE (%)	0.0	2.0	2.9	3.3	3.3	3.7	3.7
Secondary patency (SP)							
No. At Risk	126	98	85	74	61	52	41
Patency (%)	100	99.2	97.0	97.0	97.0	97.0	97.0
SE (%)	0.0	0.8	1.7	1.7	1.7	1.7	1.7



Conclusion

- Midterm results are very promising regarding patency and clinical improvement
- Safe and feasible alternative for open surgery
- Need for adapted/dedicated devices for lower procedure cost and time
- Need for long term follow and larger population

**Thank you for your
attention**



Vascular Clinic ZNA



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