

The CERAB Technique: From A Niche Procedure To A Better General Solution For Complex Aortoiliac Occlusive Disease Based On The Updated Results Of The Physician Initiated Multicenter Beglory Registry. Technical Tips And Precautions

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DISCLOSURES

Educational grant: Abbott, Bentley, Cordis, Biotronik, Gore, Penumbra and Terumo
Speaker for: Bentley, Biotronik, Cordis, Medtronic, Penumbra, Shockwave



Global CERAB Registry of patients (target >300) treated with CERAB for aorto-iliac occlusive disease using Bentley covered stents

Patients N=267 from 10 centers

Male 164 (61.4%)
Mean age: 66 years (std 8.5)

Ruth 3: 39.0%
CLT: 35.5%
TASC D: 68.2%
CTO aorta: 11.9%
CTO iliac: 56.2%

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FOLLOW-UP

Mean follow-up 2.5 years (3 months – 6 years)

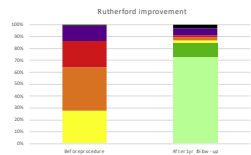
1 YEAR FOLLOW UP	PATIENTS (184)	%
PRIMARY PATEENCY	166/184	90%
ASS PRIMARY PATEENCY	170/184	92%
SECONDARY PATEENCY	180/184	98%
MORTALITY	13/184	7% NOT CERAB-RELATED

2.5 YEAR FOLLOW UP	PATIENTS (120)	%
PRIMARY PATEENCY	97/120	81%
ASS PRIMARY PATEENCY	104/120	87%
SECONDARY PATEENCY	116/120	97%
MORTALITY	13/120	11% NOT CERAB-RELATED



RUTHERFORD IMPROVEMENT – 1 YEAR FU DATA

	Before procedure	After 1 year (follow-up)
Asymptomatic	0	135
Rutherford 1	0	21
Rutherford 2	51	4
Rutherford 3	67	5
Rutherford 4	41	3
Rutherford 5	24	11
Rutherford 6	1	5



EARLY OUTCOMES

Early outcome	
Mortality	0
Technical success	99%
Intraprocedural vascular complication	1 rupture of aorta upon post-dilation of aortic device with 16mm balloon (immediate rupture coverage with BeGraft Aortic, successful)

Complications	Total	CERAB related	
<30 days	8 (3%)	3 (1.2%)	Stenosis or occlusion
>30 days - <1 year	45 (17%)	15 (6%)	
>1 year	36 (13%)	11 (4%)	


TECHNICAL TIPS Insights from the Registry

SAGE
journals

Update on covered endovascular reconstruction of the aortic bifurcation

After recanalization:

- 6/7 Fr + 9 Fr long sheath
- 12 mm aortic stent through the 9 Fr 15 mm above the aortic carrefour
- Stent implant into the aorta
- Proximal flaring of the aortic stent (usually with a 16 mm balloon) with the distal balloon marker 15-20 mm proximal to the distal stent margin – FUNNEL SHAPE
- Iliac stents positioned in the last 15-20 mm of the stent



TECHNICAL DETAILS

Access sites	Number of Patients (%)
2x femoral access	214 (80,1%)
2x femoral access + 1x brachial access	53 (19,9%)

Access modality	Number of Patients (%)
Percutaneous	107 (40%)
Open access	60%
- Unilateral open	53 (20%)
- Bilateral open	107 (40%)

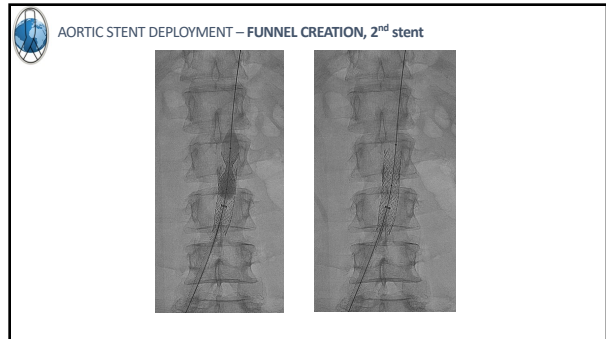
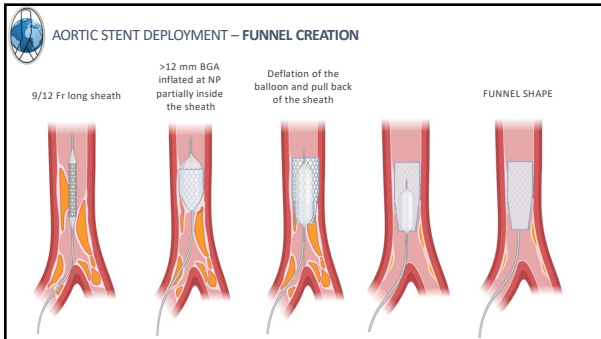
Sheath sizes	
Aortic delivery	
- Median sheath size/Modal sheath size	10 Fr/9Fr
Contralateral limb	
- Median sheath size/Modal sheath size	6Fr/6Fr

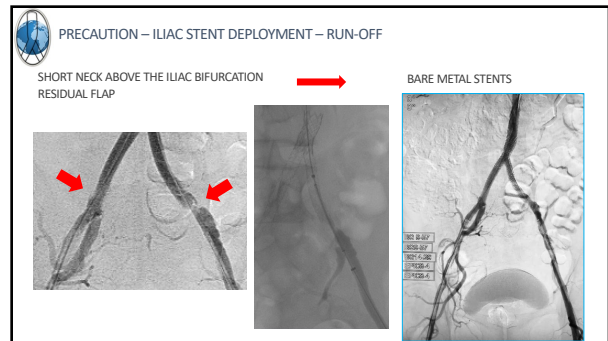
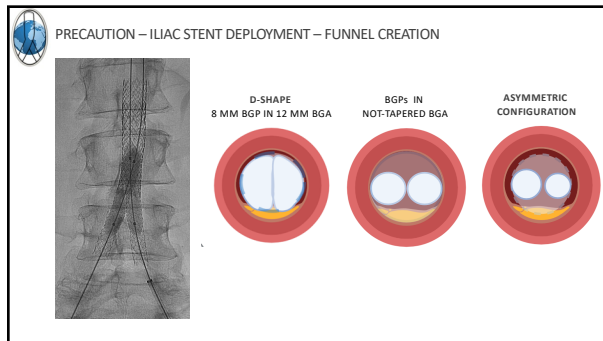
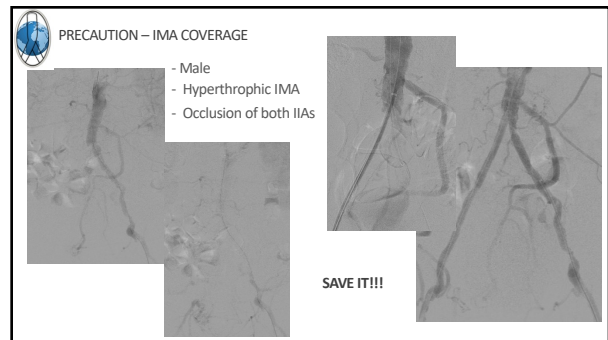
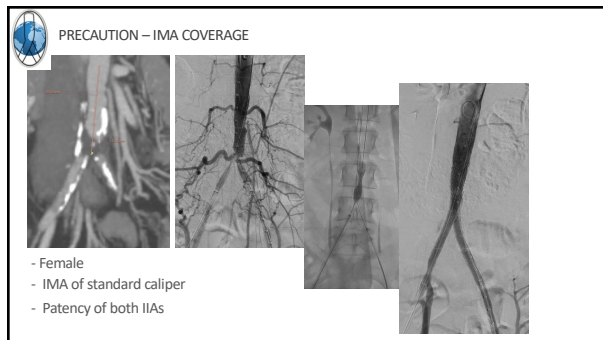
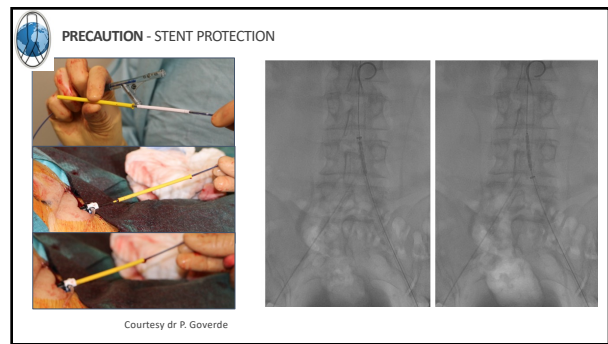
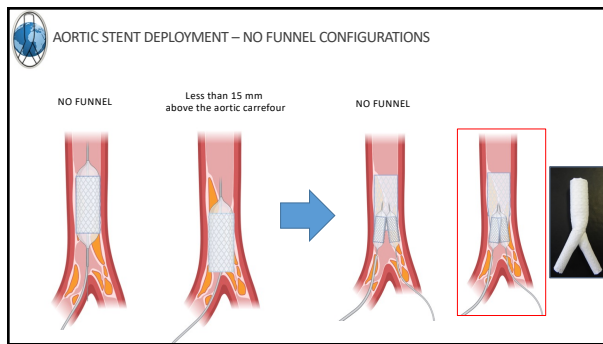
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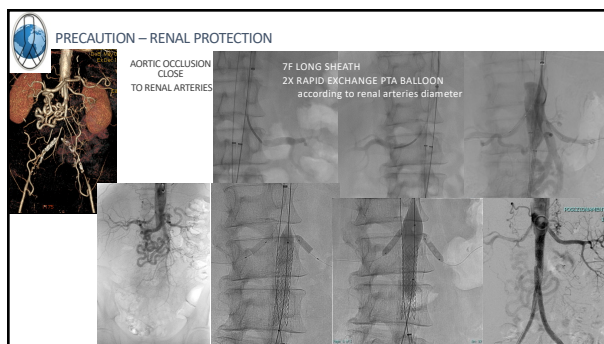
Most frequently used configuration is:

- Aortic stent 12mm
- Symmetric iliac stents 8mm

Aortic stent diameter	Total patients (%)	Iliac stent diameter	Total patients (%)
8mm	4 (1,5%)	6mm	10 (3,7%)
10mm	3 (1,1%)	7mm	46 (17,2%)
12mm	117 (43,8%)	8mm	121 (45,3%)
14mm	49 (18,4%)	9mm	39 (14,6%)
16mm	49 (18,4%)	10mm	44 (16,5%)
18mm	20 (7,5%)	12mm	3 (1,1%)
20mm	2 post dilated to 23 mm	Asymmetric	45 (17%)
22 mm	3 (1,1%)		
24mm	4 (1,5%), one post dilated to 25 mm and one to 28 mm		







TAKE-HOME MESSAGE

Global CERAB Registry confirms promising results of the technique

The procedure is a safe and effective procedure for AIOD involving the aortic bifurcation

Multicenter global registry shows differences in technique and stent configurations that seem not affecting the CERAB outcomes in a significant way

Precautions must be taken in aortic stent deployment, IMA coverage, renal protection and adequate run-off