

# Iliac branching and long-term value: How effective is preservation in a single center experience

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# Disclosure

Speaker name:

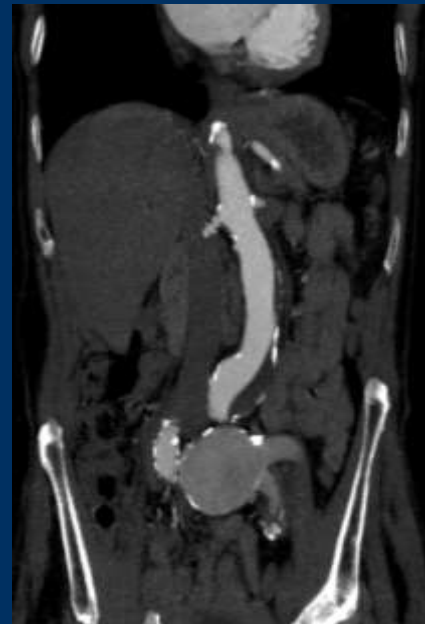
...Reza Ghotbi.....

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)
  
- I do not have any potential conflict of interest

# IBE in real life experience

- 69 consecutive cases 2013-2019
- No multicentre or registry-Data.
- No clinical selected cases (69/98)
- Single centre experience
- 31,9% urgent or emergent circumstances!



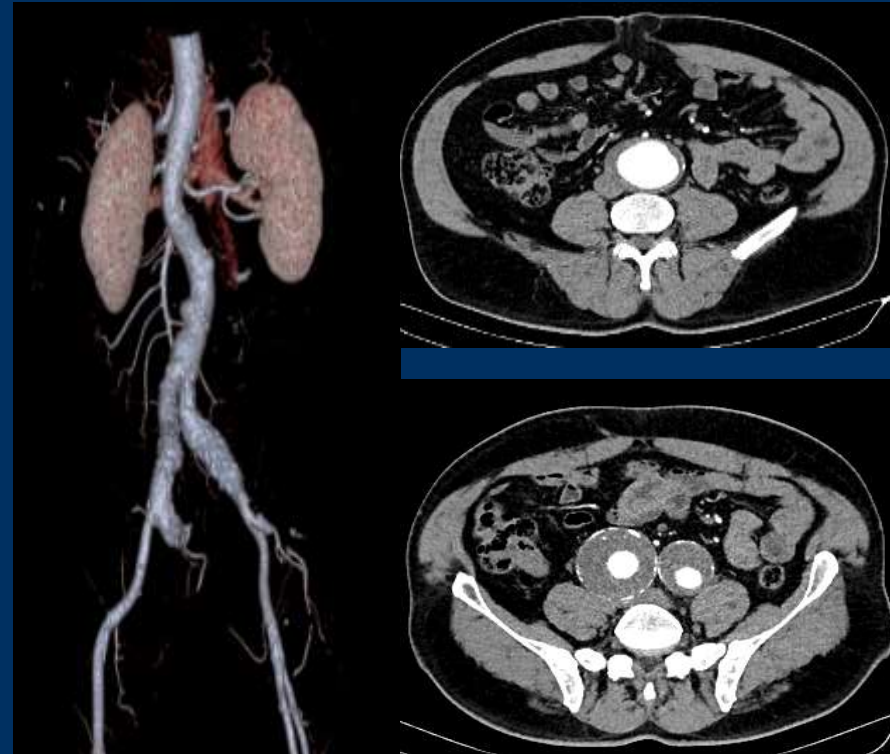
# IBE in real life experience; Patient baseline data

Age	77,3 ± 8,7	
Men	60 (86,9 %)	
Body Mass Index (BMI), m <sup>2</sup>	26,3 ± 4,1	
Hypertension	55 (79,7 %)	
PAD(≥ II)	15 (21,7 %)	
Diab. Mellitus	17 (24,6 %)	
IDDM	4 (5,8 %)	
NIDDM	13 (18,8 %)	
Cerebral Insult	15 (21,7 %)	
Arrhythmia	15 (21,7 %)	
CAD	31 (44,9 %)	
MI	10 (14,5 %)	
ACBG/Stent	19 (27,5 %)	
Carotis disease (Stenose ≥ 80 % or TEA)	6 (8,7 %)	
Renal condition		
Normal (≤ 1,4 mg/dL)	59 (85,5 %)	
Insuffizienz (> 1,4 mg/dL)	7 (1,9 %)	
Dialysis	3 (4,3 %)	
COPD	14 (2,0 %)	
Smoking	42(60,8%)	
Malignom	19 (27,5 %)	

- **CAD 45%, MI 14.5%,  
ACBG/coronary stenting 27.5%**
- **Malignoma 27.5%**
- **DM 25%**

# IBE in real life experience; periop. data

<b>IBE Prothese</b>	
Aorto mono-iliacal	59 (85,5 %)
left	30
right	29
Aorto bi-iliacal	10 (14,5%)
<b>Indikation</b>	
AAA $\geq$ 50 mm und AIC $\geq$ 23 mm	41 (59,4 %)
AAA $\geq$ 50 mm und AIC $\geq$ 23 mm und All $\geq$ 30 mm	2 (2,9 %)
CIA $\geq$ 30 mm	17 (24,6 %)
Hypogastric artery $\geq$ 30 mm	3 (4,3 %)
CIA $\geq$ 30 mm & All $\geq$ 30 mm	4 (7,2 %)
<b>Elektiv</b>	41 (68,1 %)
<b>Emergent (Progression, Pain)</b>	15 (23,2 %)
<b>Urgent (Ruptur)</b>	6 (8,7 %)
<b>Durchmesser (mm)</b>	
Aorta (infrarenal)	50,2 $\pm$ 16,5
A. iliaca comm.	30,5 $\pm$ 11,2
A. iliaca interna	26,1 $\pm$ 13,1



**In the same periode we treated 98 patients with aortoiliac or ilacal aneurysms, 70% treated with IBE.**

# IBE in real life experience; postop. data

Intervention time		100,6 ± 15,0
Technical success (24 h)		<b>91,3 %</b>
Clinical success (30 Tage)		<b>91,3 %</b>
Complications:		
Typ I Endoleak		1
Limb occlusion		4
Typ III Endoleak		1
Renal function (creatinin)		
Normal	Pre-OP	1,03 ± 0,22
	Post-OP (max. value)	1,01 ± 0,31
Insuffizienz	Pre-OP	1,73 ± 0,32
	Post-OP (max. value)	1,75 ± 0,88
Dialyse	Pre-OP	4,19 ± 1,59
	Post-OP (max. value)	4,13 ± 1,27
ICU/IMC (d)*		1,3 ± 0,8
Hospital Stay (d)*		6,1 ± 2,6
LOS (d)*		7,3 ± 2,5

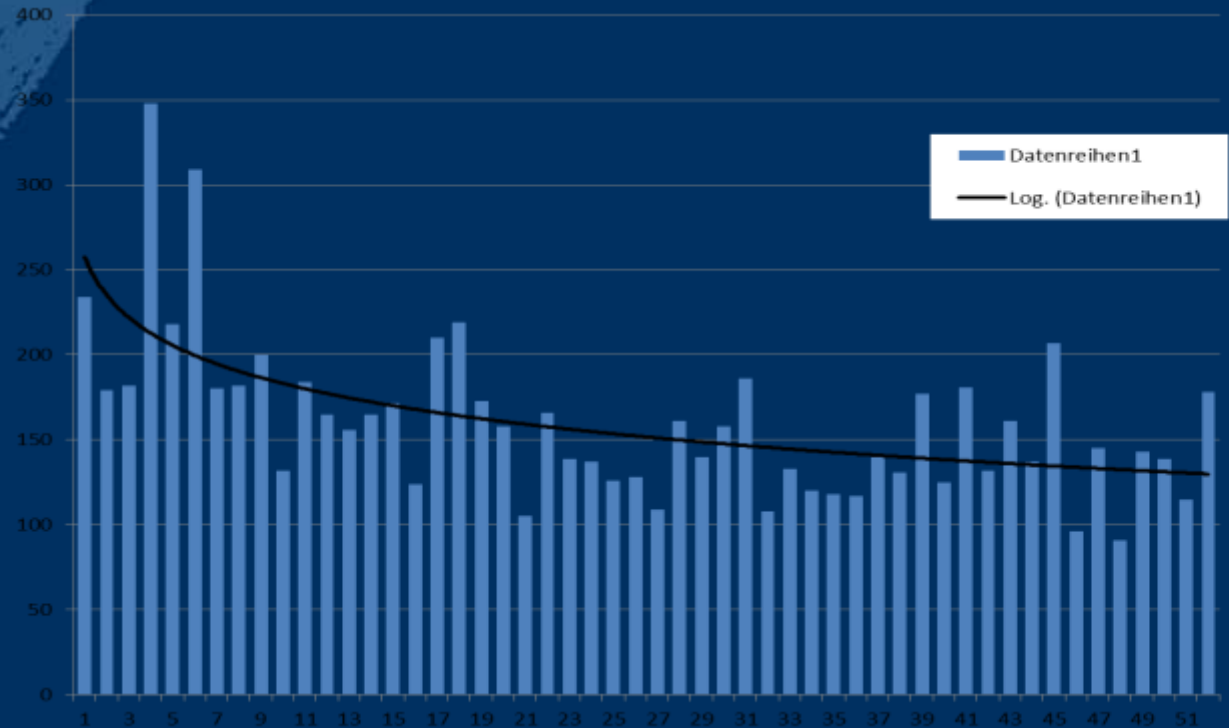


Technical success was defined as the successful introduction and deployment of the endovascular device in the intended location(s) with exclusion of the (aorto-)iliac aneurysm(s) without aortic rupture or mortality.

**We observed a decrease of the procedure time as well as the amount of contrast.**

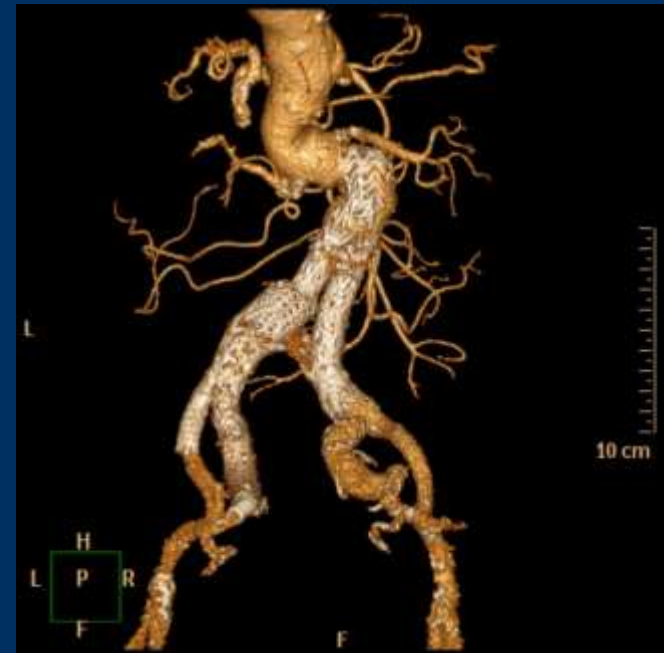
# IBE in real life experience; periop. data

Procedure-time (min)	
Total	166,0 ± 49,3
Intervention	100,6 ± 15,0
mono-iliacal (n=54)	162,0 ± 49,6
bi-iliacal (n=8)	189,75 ± 57,8



# IBE in real life experience; mid term follow up

30- d Mortality	-
In-hospital Mortality	--
Follow-up (Years)	2,5 ± 1,9
cum. Patientyears	140,9
Non aneurysmal related mortality (Follow-up)	20 (32,2 %)
Age, Infection	8 (40,0 %)
Malignoma	6 (30,0 %)
Urosepsis	2 (10,0 %)
MI	2 (10,0 %)
A-Dissection (Bogenruptur)	1 (5,0 %)
Aorta rupture (abd.)	1 (5,0 %)
Endoleaks	
Typ II	12
Spont. resolved	4
Progression (> 5 mm)	6
Re-Interventionen	8 (11,6 %)
(6 Monate)	3
(> 2 Jahre)	5
Komplikationen	
Infection	--
Rupture	1
Stent migration	--
Loss of device patency	--
Loss of integrity	--



For a sufficient distal sealing, we used in 8 cases more than one iliac stent graft component into the distal normal hypogastric artery.



# Experience with the GORE EXCLUDER iliac branch endoprosthesis for common iliac artery aneurysms

van Sterkenburg et al (J Vasc Surg 2016;63:1451-7.)

**Objective:** procedural success and early outcome of endovascular treatment of a multicenter cohort of patients with common iliac artery (CIA) aneurysms treated with the new GORE EXCLUDER (W. L. Gore & Associates, Flagstaff, Ariz) iliac branch endoprosthesis (IBE).

**Methods:** A **retrospective cohort** analysis was performed in **13 sites** in The Netherlands. Anatomic, demographic, procedural and follow-up data were assessed from hospital records.

**Results:** From November 2013 to December 2014, **51 CIA aneurysms** were treated with **an IBE in 46 patients**.

The median diameter of the treated aneurysm was 40.5 (range, 25.0-90.0) mm. The mean procedural time was 198 6 56 minutes. All but one implantation were successful; two type Ib endoleaks were noticed, resulting in a **procedural success rate of 93.5%**. The two type Ib endoleaks spontaneously disappeared at 30 days. There was **no 30-day mortality**.

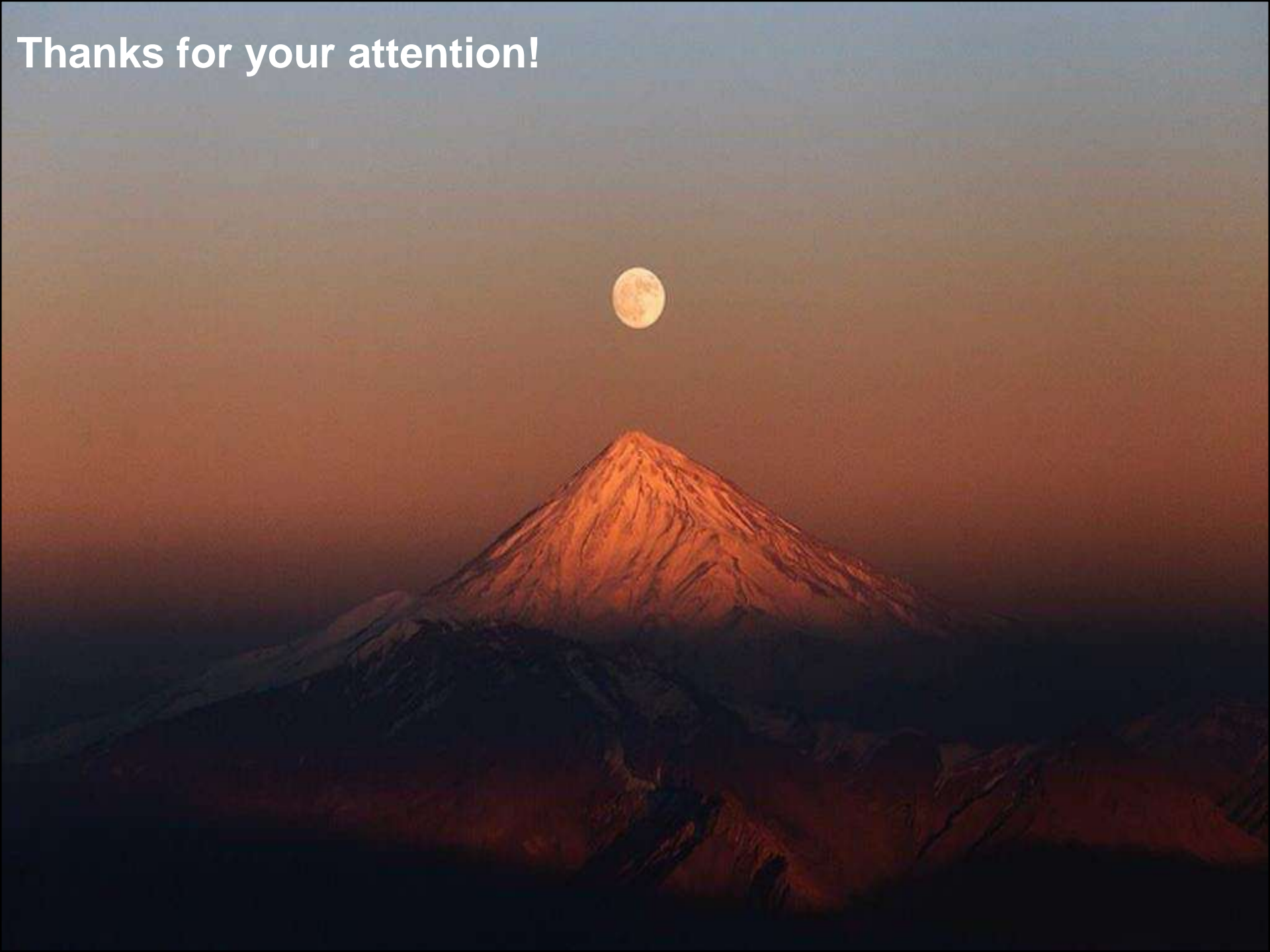
Ipsilateral buttock claudication was present in only two cases at 30 days and disappeared during follow-up. The incidence of reported erectile dysfunction was low and severe ischemic complications were absent. After a **mean follow-up of 6 months**, data on 17 treated aneurysms were available. Two showed a stable diameter, whereas 15 showed a mean decrease of 3.9 6 2.2 mm ( $P < .001$ ).

**Reinterventions were performed in two patients (7.1%). The 6-month primary patency of the internal component of the IBE device was 94%.**

# Conclusions

- The use of the GORE-IBE device for CIA aneurysms is related to high procedural success, high patency rates, and low reintervention rates at 2 years follow-up.
- IBE is a safe and effective option even for high-risk-patients. It can be performed electively as well as in urgent or emergent cases.
- Applicability was with 70% in unselected cohort high.
- No IBE-related Mortality, Infection or Stent migration.
- Due to a known type-1-endoleak (patient refused reintervention), one fatal aortic rupture occurred.
- The higher contrast amount didn't results in renal dysfunction in any case.
- Gluteal claudication occurred in one case (1/4) with hypogastric limb occlusion.
- As complications occur in delay manner, long term follow up is recommended.

Thanks for your attention!



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