

Value of stent graft placement to treat cephalic arch stenosis in HD patients

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

Consulting/Honorarium WL Gore, BD

Cephalic Arch Stenosis

Most common cause of BC AVF failure

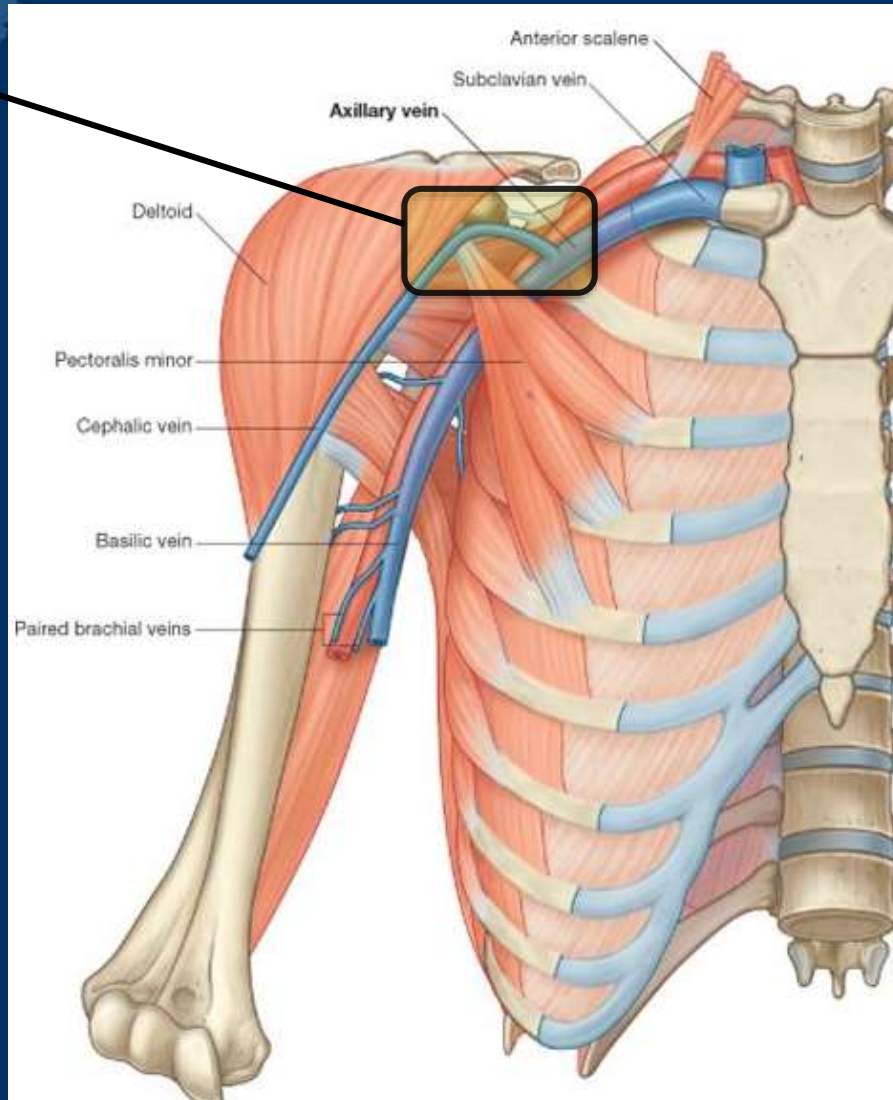
Poor patency results with Venoplasty alone (42% 6months)

High rates of recurrence



Anatomy

“The central perpendicular portion of the cephalic vein as it traverses the deltopectoral groove and joins the axillary vein.”





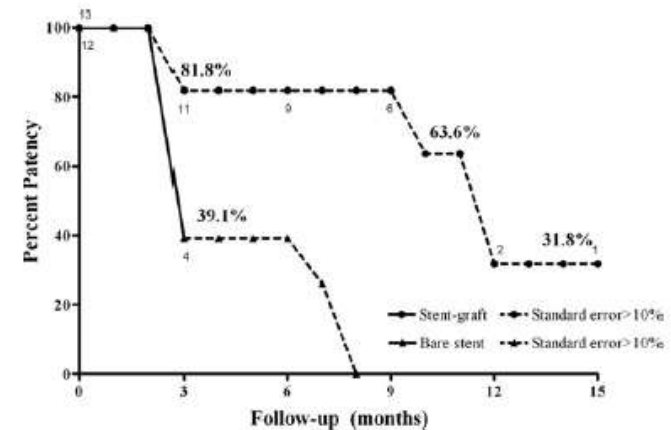
Cephalic Arch Stent Grafts

	Study Design	n =	Technical Success	Primary Patency 3, 6, 12 months
Shemesh et al J Vasc Surg 2008 [Fluency]	RCT (Stent-Graft vs Bare Metal)	13	100%	81%, 81%, 32% (39%, 39%, 0%)
Rajan and Falk JVIR 2015 [Viabahn]	RCT (Stent-Graft vs PTA)	9	100%	100%, 100%, 29% (60%, 0%, 0%)
Jones et al JVIR 2017 [Viabahn]	Retrospective	39	100%	85%, 67%, 42% (Venographic)
Miller et al J Vasc Surg 2018 [Viabahn]	Retrospective	50	100%	90%, 74%, 60%

Bare Metal Stents vs Stent Grafts

Angioplasty with stent graft versus bare stent for recurrent cephalic arch stenosis in autogenous arteriovenous access for hemodialysis:
A prospective randomized clinical trial

David Shemesh, MD,^a Ilya Goldin, MD,^a Ibrahim Zaghal, MD,^b Daniel Berlowitz MB, BChir,^b
David Raveh, MD,^c and Oded Olsha, MB, BS,^a *Jerusalem, Israel*

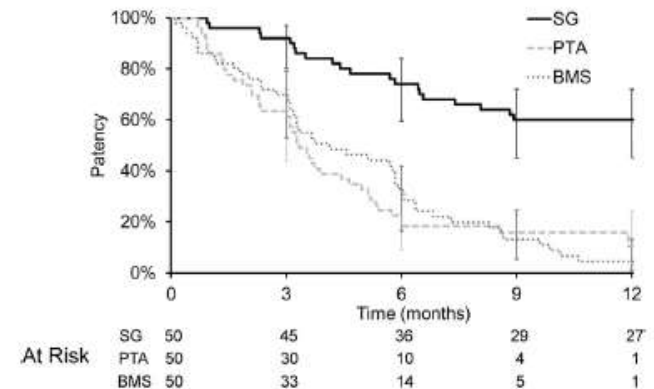


Use of the Viabahn stent graft for the treatment of recurrent cephalic arch stenosis in hemodialysis accesses

Gregg A. Miller, MD,^a Dean C. Preddie, MD,^a Yevgeny Savransky, MD,^a and Lawrence M. Spergel, MD,^b
Brooklyn, NY; and San Francisco, Calif



Primary Patency for CAS Treatment Modalities



Stent Grafts

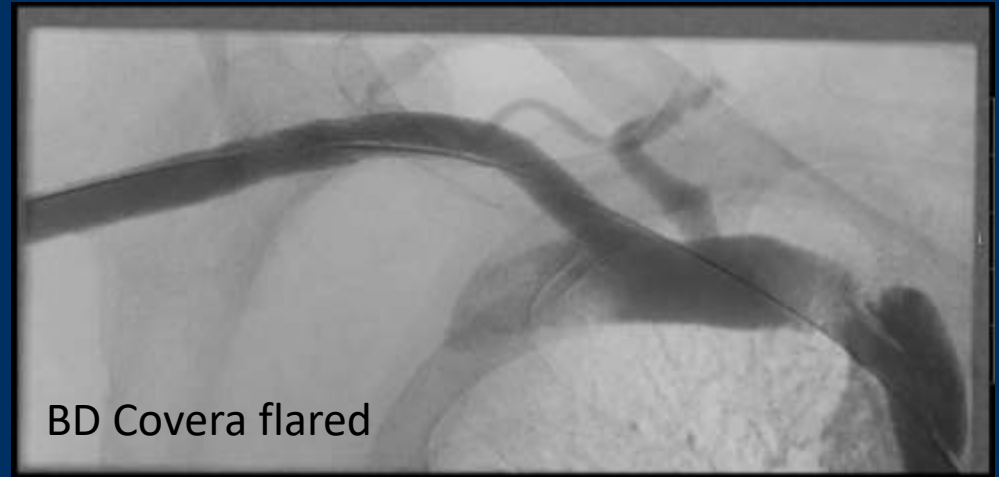
Self-expanding

Precise delivery

Flexible

Conform well

Durable



BD Covera flared

Image courteous of Dr Karunanithy, London

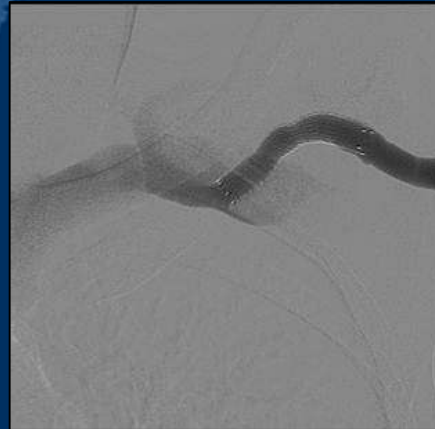
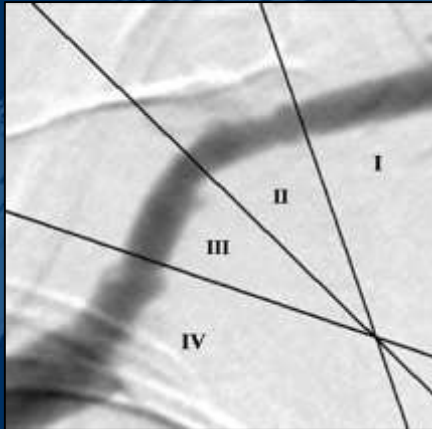


Gore Viabahn



Gore Viabahn

Stent graft positioning



Cover
stenosis

Align
Flow vectors

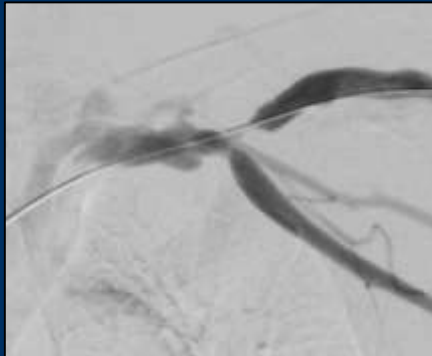
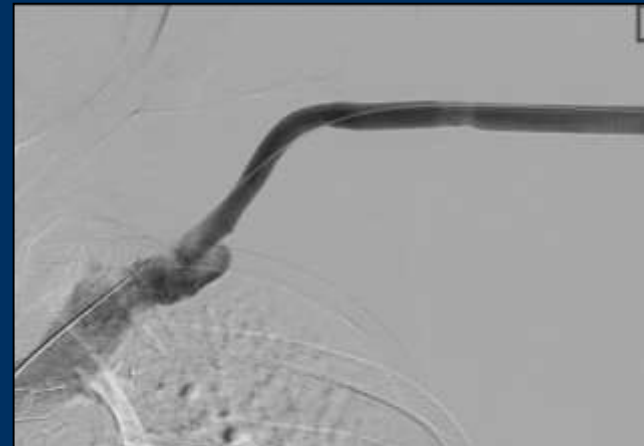
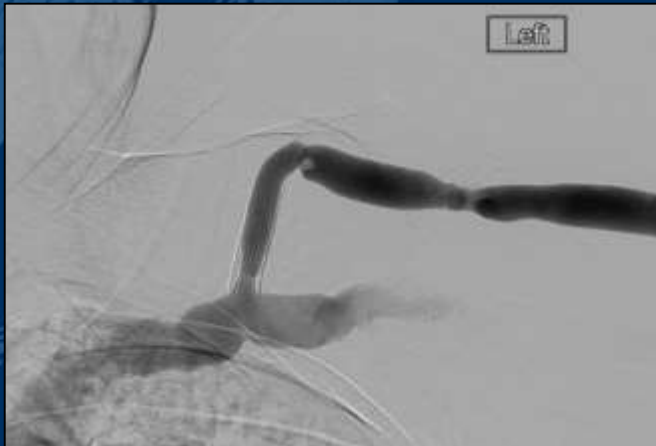
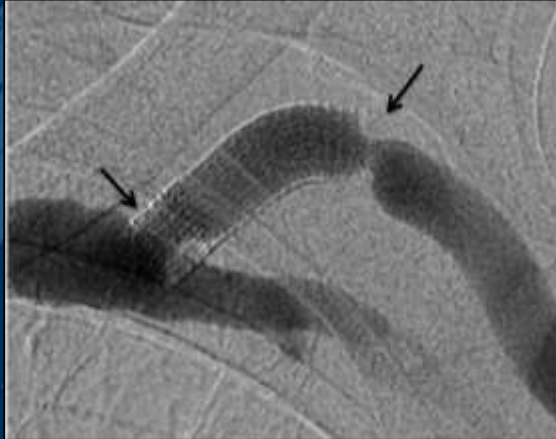


Image courteous of Dr Karunanithy, London

Stent graft positioning



Edge stenosis



Site of re-stenosis:

Lateral edge > Both edges > Medial edge

Summary – Value of Stent Grafts

Poor results with Venoplasty and Bare Metal Stents

Consider Stent Graft when Venoplasty fails

Stent-grafts: high primary patency rates and low re-intervention rates

Technical considerations important

Thank You

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