

The Paradigme must change the fistula has to be reliable



Eric S Chemla

St George's vascular Institute

London, UK



St George's Healthcare



NHS Trust

Introduction

- It is widely accepted that native AVFs are first options before grafts (DOQI 2006)
- However before DAC (JAMA, May 2008) no-one examined maturation rates other than raw patency rates
- How about dialysis quality metrics?
- Cannulation, pump speed, adequacy, number of CVCs used, readmission rate...



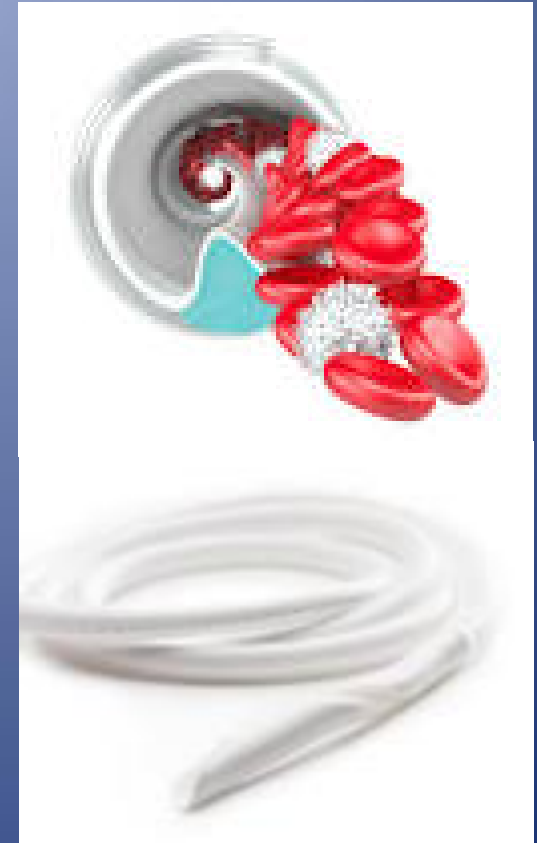
What is the definition of maturation?

- It is not only patency
- DAC says ' 8/12 successful consecutive dialysis shifts with min PS of 300ml/min within a 30 day period'
- Rule of 6s: 6mm-6mm-600ml/min
- Rule of 5s
- ? Number of temp. CVCs, infections, acquired central vein disease



The truth about native access

- A mature patent native angioaccess is better than anything else DOQI not revised since 2007
- Maturation rate in the DAC study was 40% only!
- FFBI failed to decrease significantly the number of CVCs
- J Wish: 'Catheter last-fistula not so first' JASN, 2015; 26: 5-7
- D Drew, C Lok: '**Vascular access choice in incident hemodialysis patients: a decision analysis**' JASN 2015; 26: 183-91: *Overall, the advantages of an AV fistula attempt strategy lessened considerably among older patients, particularly women with diabetes, reflecting the effect of lower AV fistula success rates and lower life expectancy. These results suggest that vascular access-related outcomes may be optimized by considering individual patient characteristics..*



The truth about native access

- Lok CJASN, 2013;8: 810-8: ‘Cumulative patency of contemporary fistulas versus grafts (2000-2010)’.
- Same patency when primary native failures were included with grafts necessitating twice as many interventions
- Primary failures increase refusal rates for a second access and therefore the likelihood of a CVC



Characteristic of dialysis population in the world

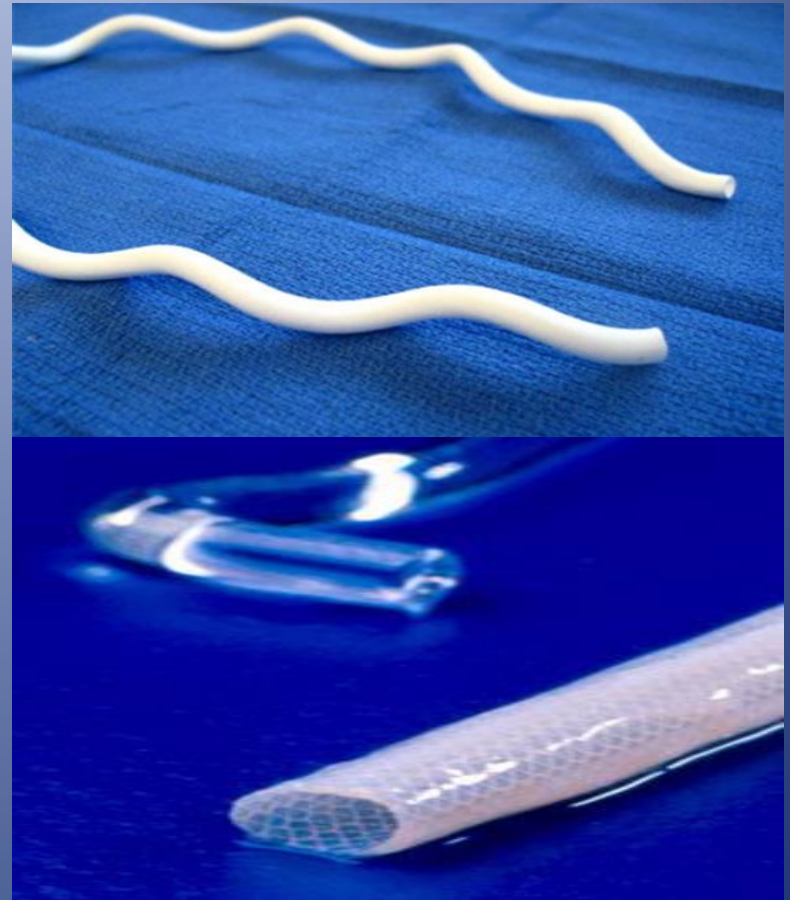
- Diabetes has risen dramatically over the past years (45% were type II diabetes in DAC)
- In 2015 almost 366 millions will have type II diabetes
- The elderly population is also increasing fast (19% over 65 and 5% over 80 in the UK)
- Are grafts to be then considered as first option for certain populations?



“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”

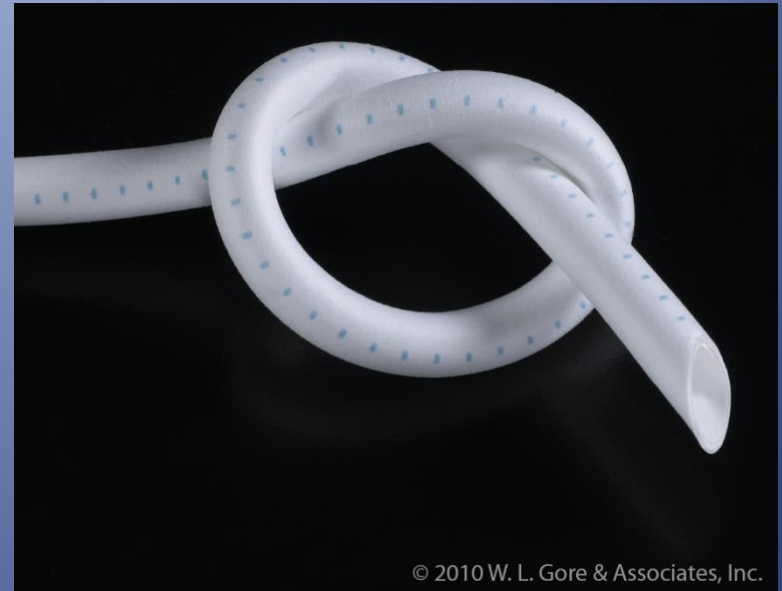
New grafts are now available

- Early cannulation: Less CVCs
- Semibiological or biological: better patency-less infection
- Spiral flow pattern technology: better patency
- Nano technology: less infection better cannulability
- Hybrid grafts: easier handling so more indications?
- HeRO catheter to push some boundaries further
- Cutting edge technology?

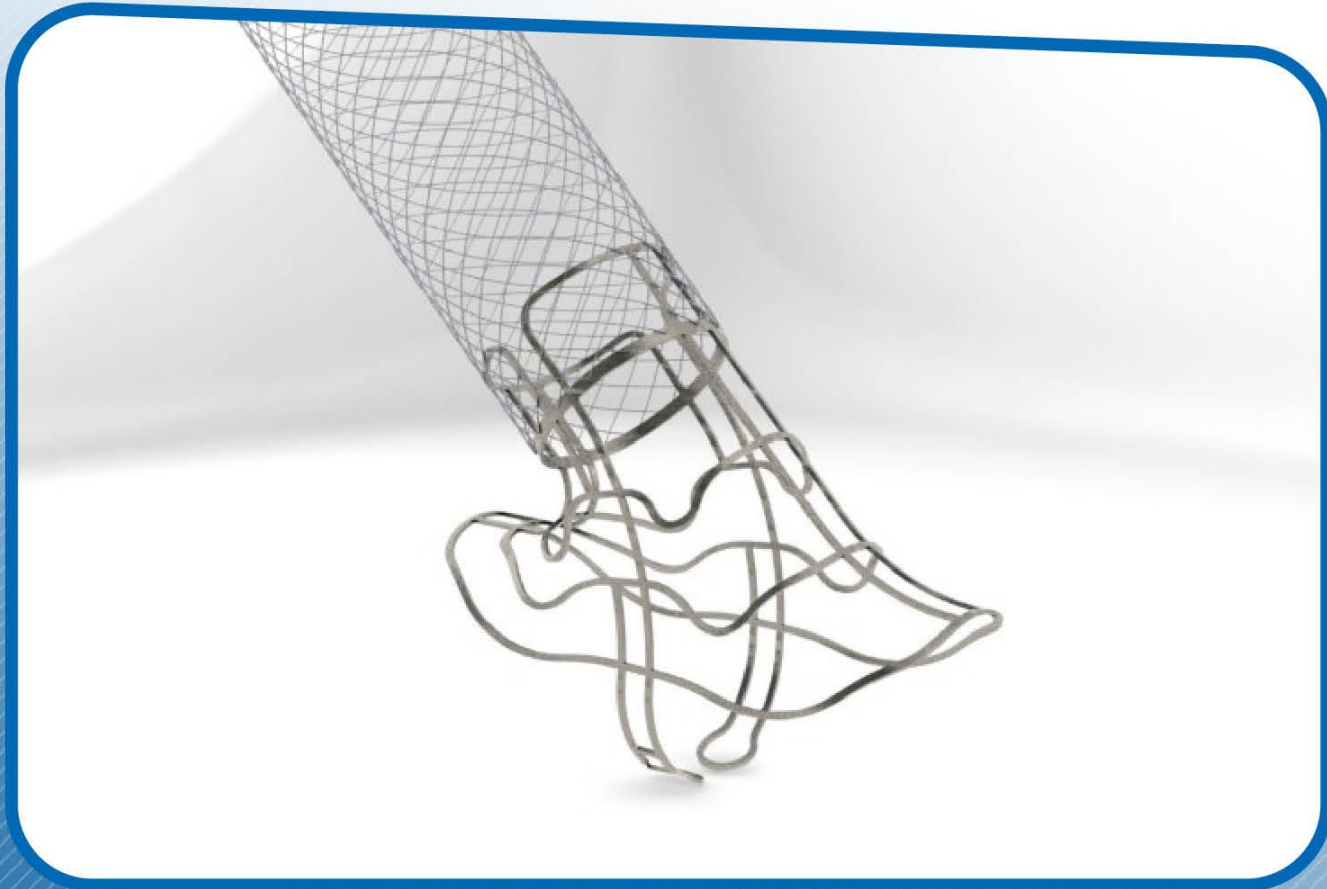


Personal experience Acuseal since 2011

- 55 cases over the past 3 years
- All admitted the night before
- Dialyzed through their catheters which is then removed
- Primary and secondary patency at 1 Y: 46 and 61%
- Infection 12% all minor localized except for one sepsis
- 4 deaths during follow up so far
- We need an RCT comparing natives to AVFs in this category of patients

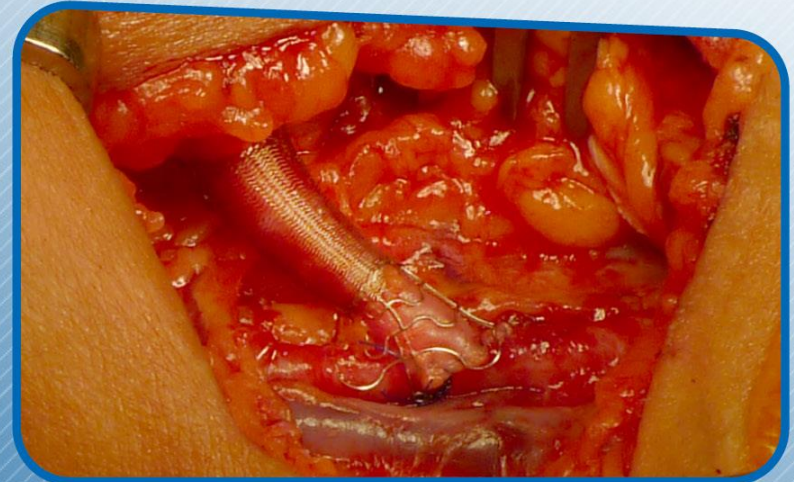
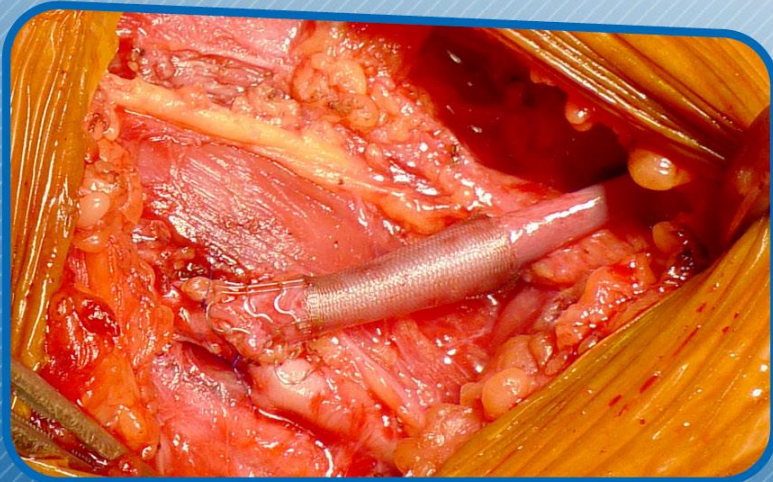


Laminate Extra Vascular Flow Optimizing Device



Laminate Extra Vascular Flow Optimizing Device

- › 1 minute implementation
- › Doesn't change the normal procedure
- › No blood contact



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Dr. George
AXIC
VC21B
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Clinical Study Results

VasQ™ (St. Georges Hospital)

1 Month

- › Patency: (15/15) 100%
- › Flow Rate: 1282 ml/min
- › Maturation: (13/15) 87%

3 Months

- › Patency: (12/13) 92%
- › Flow Rate: 1679 ml/min
- › Maturation: (12/13) 92%