Clinical Application Experience with an Early Stick Cannulation Graft

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DISCLOSURES
- Cryolife
  - Speaker and consultant
- GORE
  - Speaker
- Hohmann Family
  - Speaker, very few listen

Wish List for Early Cannulation
- Ready to be used immediately (NO CATHETER)
- Good handling
- Easy access instructions
- Durability
- Easy tunneling (no kinking)

Best Place for a Catheter!

Gore Acuseal

Tri-Layer Design

- **Outer Graft Layer**
  - Expanded polytetrafluoroethylene
- **Middle Graft Layer**
  - Elastomeric membrane
- **Inner Graft Layer**
  - Expanded polytetrafluoroethylene
  - CBAS® Heparin Surface

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Proven Thromboresistant Luminal Surface

GORE® PROPATEN® Vascular Graft (n = 83), Standard ePTFE (n = 67)*
- Ingemar Davidson, MD, UT Southwestern, Dallas, Texas

* Data on file
† N = 138, three grafts were not cannulated

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Prospective multicenter study with a 1-year analysis of a new vascular graft used for early cannulation in patients undergoing hemodialysis

Marc H. Gilmore, MDS; Jason Bergin, MD; Todd Coll, MD; Pradeep Roy-Chaudhury, MD, PhD; and Henry Schuman, MDS, New York, NY, Charleston, SC, Greenwich, CT, Cincinnati, OH, and New York, NY

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ACUSEAL Vascular Graft Clinical Study* (N=138):

<table>
<thead>
<tr>
<th></th>
<th>GORE® ACUSEAL VASCULAR GRAFT</th>
<th>HISTORICAL CONTROL</th>
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<tbody>
<tr>
<td>6 month follow-up</td>
<td>24%</td>
<td>75%</td>
</tr>
<tr>
<td>12 month follow-up</td>
<td>64%</td>
<td>40%</td>
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<table>
<thead>
<tr>
<th>Time since implantation</th>
<th>GORE® ACUSEAL VASCULAR GRAFT</th>
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<tbody>
<tr>
<td>Within 24 Hours</td>
<td>n=30 (22.4%)</td>
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<tr>
<td>Within 48 Hours</td>
<td>n=48 (40.0%)</td>
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<tr>
<td>Within 72 Hours</td>
<td>n=54 (40.0%)</td>
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<td>Within 7 Days</td>
<td>n=75 (51.8%)</td>
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PATIENT A.G.
Consult (Friday Afternoon)

Request Tunneled catheter

“Party Crasher” ie never knew he had any kidney disease

PMH: DM II and Hypertension

Vein mapping with small sclerotic cephalic and basilic

OR Friday night – Acuseal

POD #1 Saturday, July 12, 2014

Discharged Tuesday
OFFICE CONSULTATION

CC: “white scab”

HPI: 60s year old female with long standing ESRD

PMH: DMII, HTN, multiple previous accesses

PE: Self explanatory

A: Problem

P: OR

Infected portion of graft

Graft tunneled

Anastomosis completed and infected graft excised

ALWAYS DRAW!

POD week #2

Continuing to use access without issue

No signs of infection
Staples removed and access continues to be in use

Patient S.G.
September 2014

- 42 year old
- ESRD, CABG, HTN, DM II, left BKA, steal syndrome of right thigh av graft
- Left femoral permcath not functioning well
- Asked to evaluate for new permcath
Algorithm Change

- Fistula is still 1st
- If unable to create fistula, skip the catheter and place early stick graft, as distal as possible (ie forearm) to dilate proximal veins
- If patient requires dialysis emergently, place non-tunneled dialysis catheter, get volume off or correct potassium and then place fistula or if unable to create fistula place early stick graft and remove catheter
- Prefer regional anesthesia

Conclusions

Acuseal handles well
No Sweat (literally)
I like to tunnel with 7mm head
Draw on patient and COMMUNICATE
Used to not like for small arteries, BUT 4-7mm now available
Leap of faith, best with no safety net
And Don’t Forget to Hold On Tight

Thank you for your attention!

VEITH SYMPOSIUM
Connecting the Vascular Community