



Anthony
HeRO Graft recipient
(Raleigh, NC)

“I feel much healthier, I’m not as tired, I have more energy, and it’s great that I can take a shower.”

“I also can stop worrying about vascular access. I can feel the better cleaning.”

Anthony’s Story of Receiving HeRO Graft

This interview was conducted by Lesley Dinwiddie, RN on Friday, July 8, 2013.

- *What was the story of how you came to receive the HeRO Graft?*

“I have had kidney failure since 1991. I had peritoneal dialysis (PD) until I received a transplant in 1995 in New Jersey, where I lived at the time. My brother and I then moved to North Carolina. I lost my transplant and had to start back on dialysis in May 2001. I tried to do PD again, but I could not get enough cleansing, so I went on hemodialysis. Between then and now I’ve had so many catheters and surgeries for fistulas and grafts in all areas of my arms and both my legs. Many of them did not work or last long. And in February of this year, I had 6 different catheters placed. I was getting so aggravated and frustrated that my doctors sent me to [a University Medical Center].”

- *Why did your doctor think it was a good option for you?*

“He thought they would give me a spine (translumbar) catheter, but they put in another chest catheter at [a University Medical Center]. When that didn’t work well, they sent me back in March and put in a HeRO Graft as well as another catheter that worked until they were able to use the HeRO Graft in April.”

- *Has there been a difference in your hemodialysis treatments with the HeRO Graft compared to other accesses you have had previously (if so, please explain)?*

“Oh yes, the flows are much higher [with the HeRO Graft at] around 450 to 500 [mL/min]. Three hundred and fifty (350) [mL/min] was the best they could get with catheters, and they kept on clotting.”

- *If you were to summarize your feelings about the HeRO Graft in a few words what would they be?*

“I feel great. I didn’t know what to expect, but I know I get better flow and better cleansing.”

- *What difference has the HeRO Graft made to your quality of life?*

“I feel much healthier, I’m not as tired, I have more energy, and it’s great that I can take a shower. I also can stop worrying about vascular access. I can feel the better cleaning.”

- *What would you say to someone else who may be a HeRO Graft candidate, but is unsure about it (assuming his or her doctor thinks it is a good option)?*

“I would tell them how good it has worked for me.”

See page two for a summarized case report from Anthony’s physicians.

“Anthony is enthusiastic about [a] HeRO Graft placement and the ability to maintain access in his upper body.”

Jeffrey Lawson, MD, PhD
Shawn Gage, PA-C

This is a summarized case report from Anthony’s physicians:

Anthony’s Case History

- 38 year old African American male with renal failure of unknown etiology
- Started hemodialysis (HD) at the age of 15
- Started with peritoneal dialysis (PD) then HD
- 3 AV Fistulas (AVFs) in the right upper extremity
- 2 AVFs in the left upper extremity
- Failed kidney transplant that worked for 5 years
- At least 20 tunneled dialysis catheters (TDCs) bilaterally

Central Venous Imaging

- Subclavian and brachiocephalic vein occlusion bilaterally as well as the right axillary vein
- Superior Vena Cava (SVC) occlusion with multiple collateral veins present
- Right Internal Jugular (IJ) TDC traverses occluded brachio-cephalic vein and SVC stents

HeRO Graft Operative Notes

- HeRO Graft Venous Outflow Component (VOC) placed via right IJ TDC cut down and exchange (through occluded stent)
- Angioplasty of veins with 8mm high pressure balloon
- Axillary artery used for HeRO Graft arterial inflow

Post-Operative HeRO Graft Notes

- Initial bout of hypotension and lethargy. Treated by fluid support and changes to dialysis Rx
- Back to work at 2.5 weeks
- Started using HeRO Graft at 3.5 weeks
- Bridging femoral TDC removed by 4.5 weeks from surgery (6 weeks total)

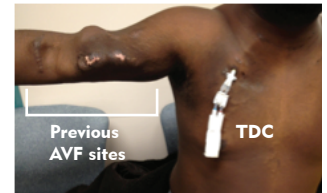
Interventions

- HeRO Graft implanted for 4 months with no issues
- HeRO Graft started to require multiple declots
- Resolved with angioplasty of intragraft stenosis
- No issues to date 3 months later

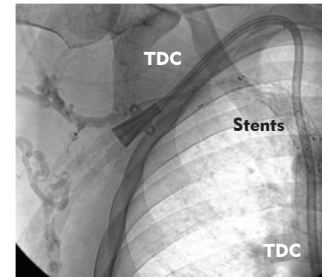
Lesley Dinwiddie, RN, Jeffrey Lawson, MD, PhD and Shawn Gage, PA-C are paid consultants of CryoLife, Inc. Anthony, the HeRO Graft recipient, was not compensated for his involvement. Results may vary.

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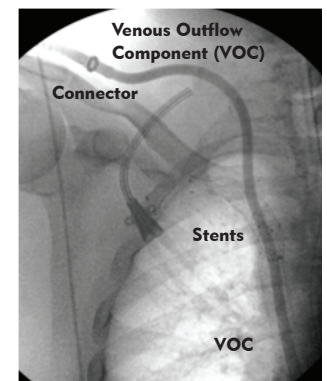
Pre-operative photo before Anthony received the HeRO Graft



Fluoroscopy image of Anthony’s TDC traversing occluded brachio-cephalic vein and SVC stents



Drawn pathway of Anthony’s subcutaneous HeRO Graft implant. Note the location of the incision sites.



Fluoroscopy image of Anthony’s HeRO Graft Connector and Venous Outflow Component. The VOC traverses the brachio-cephalic vein and SVC stents to the right atrium.