

HEY I CAN DO THAT!

MODERATELY COMPLEX CASE

SATURDAY APRIL 5, 2025 – 2:30 SESSION VIII

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PRESENTER DISCLOSURE

Presenter: Nicholas Peti

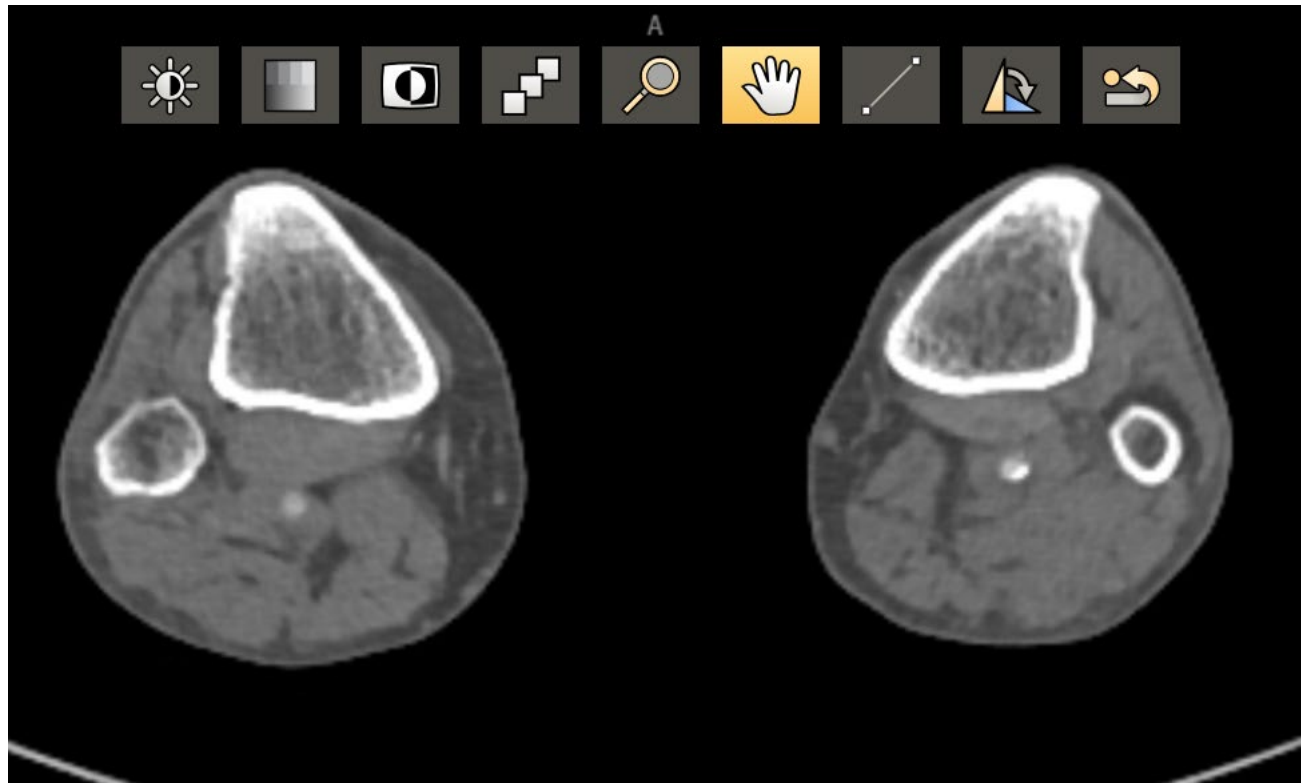
- I have no current relationships with commercial entities

MY BIG COMPLEX CASE

- I was trying to come up with a big aneurysm case, but a recent JVS Journal Club caught my interest...

MARCH 2023 – 88 YEAR OLD MAN

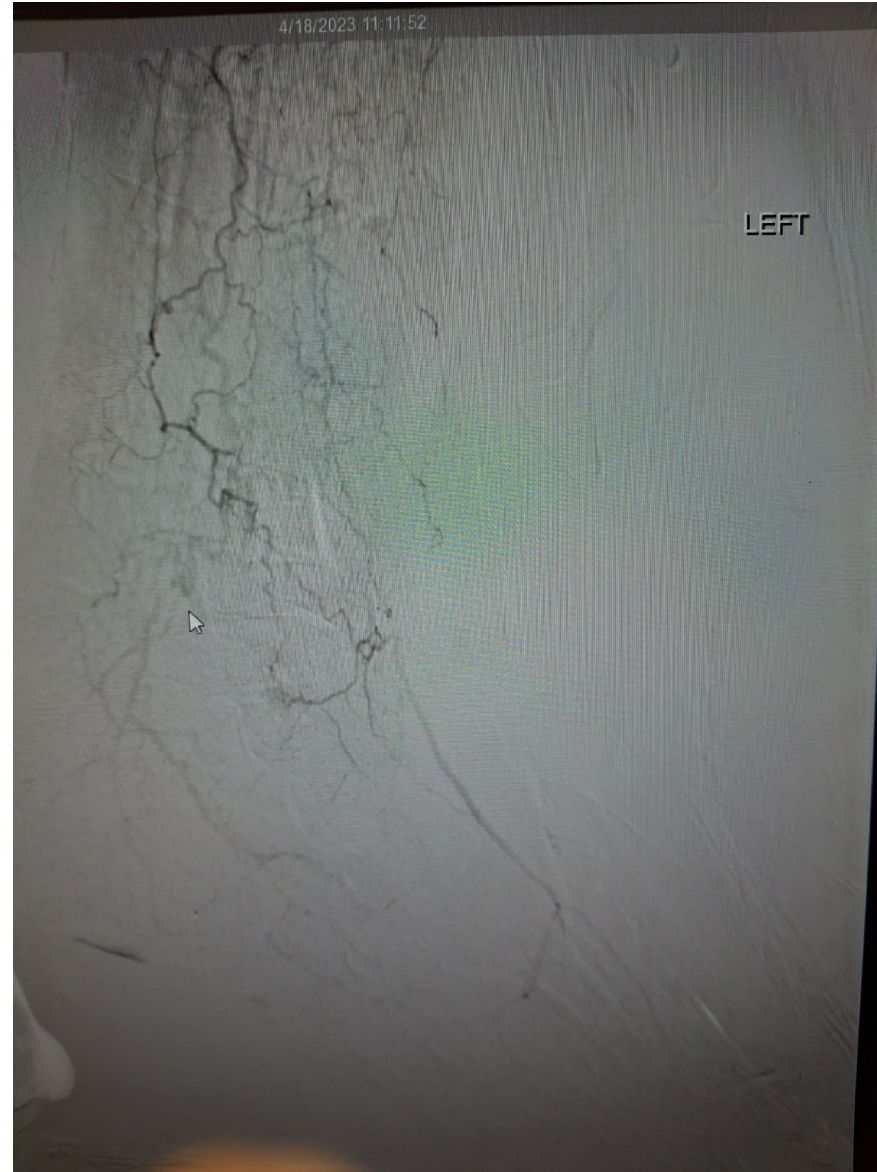
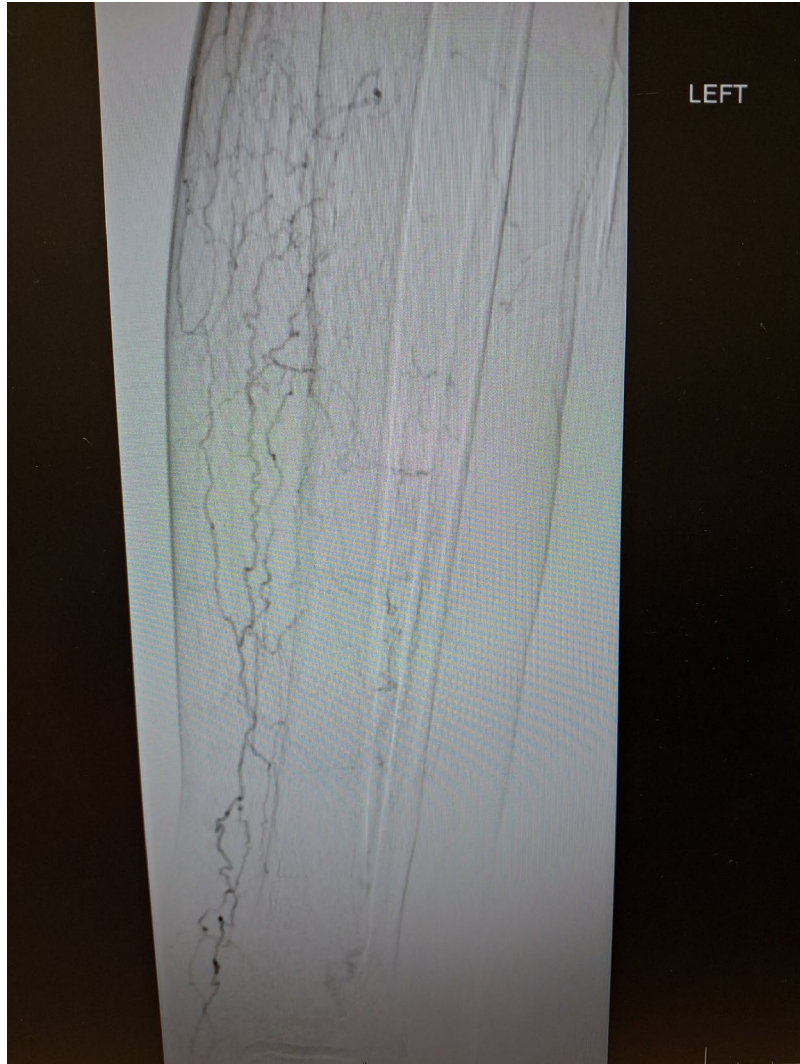
- Referred routinely with ischemic left foot
- Dry necrosis left 3 and 4 th toes – deteriorated over 2 months
- ABI Right 1.5 Left undetectable
- CTA Had me thinking fem to BK Pop – tibials at least calcified though...



WHAT ABOUT THE PATIENT?

- 88 year old man – lives independently with his wife
- Distant Ex smoker
- CAD – 3 stents – no symptoms – now legs claudicate
- Left 4th toe completely dead, 3rd toe some necrosis
- He has significant rest pain, worse at night
- Per routine
 - Failed community trial IV Antibiotics
 - And done an ultrasound to rule out DVT

ANGIOGRAM



ANGIO REPORT (YES AFTER WE LOOKED AT PICTURES OURSELVES)

- The SFA is patent (though a bit shaggy distally)
- The popliteal artery occludes early
- The proximal tibial vessels are occluded
- The DP is of reasonable caliber and provides a deep plantar collateral
- The PT is recanalized distally but severely attenuated

OPTIONS

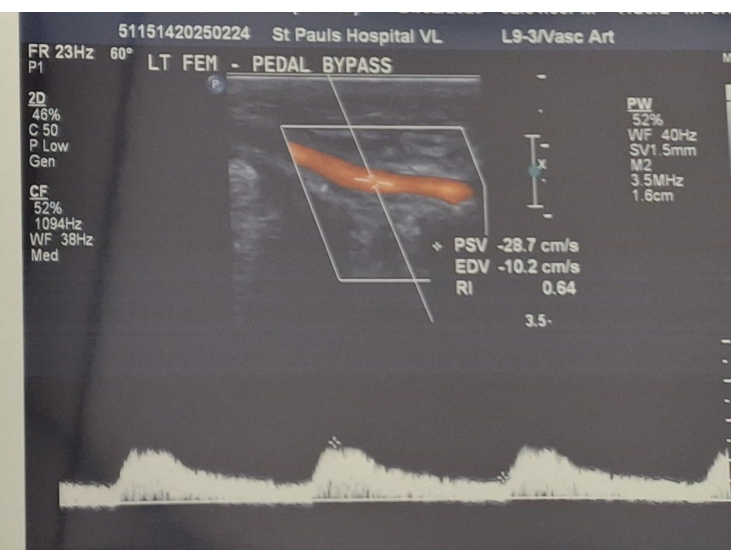
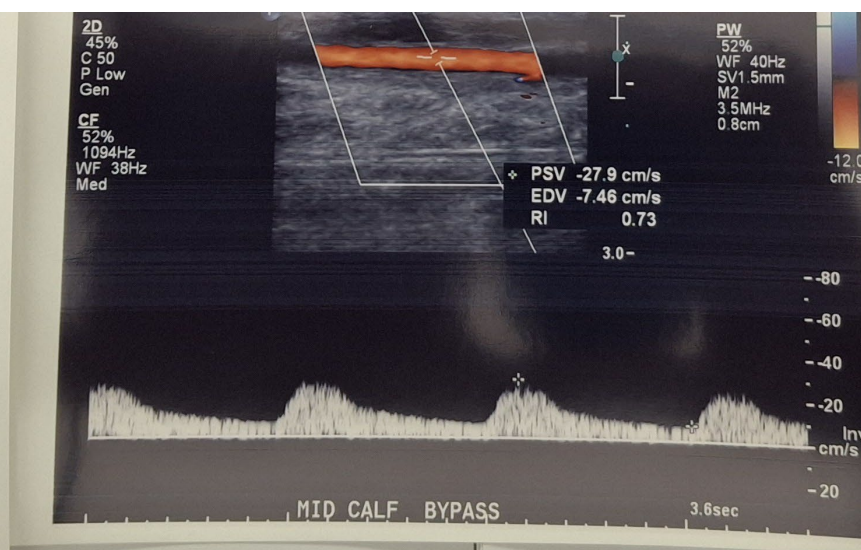
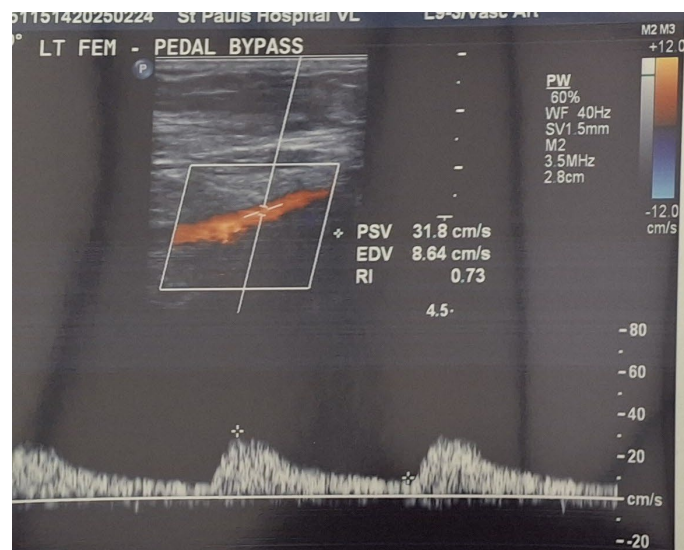
- a) Bypass to blind segment BK pop
- b) Left femoral to PT or DP bypass
- c) Arterialization of deep vein
- d) Conservative therapy
- e) Major limb amputation
- f) Other?

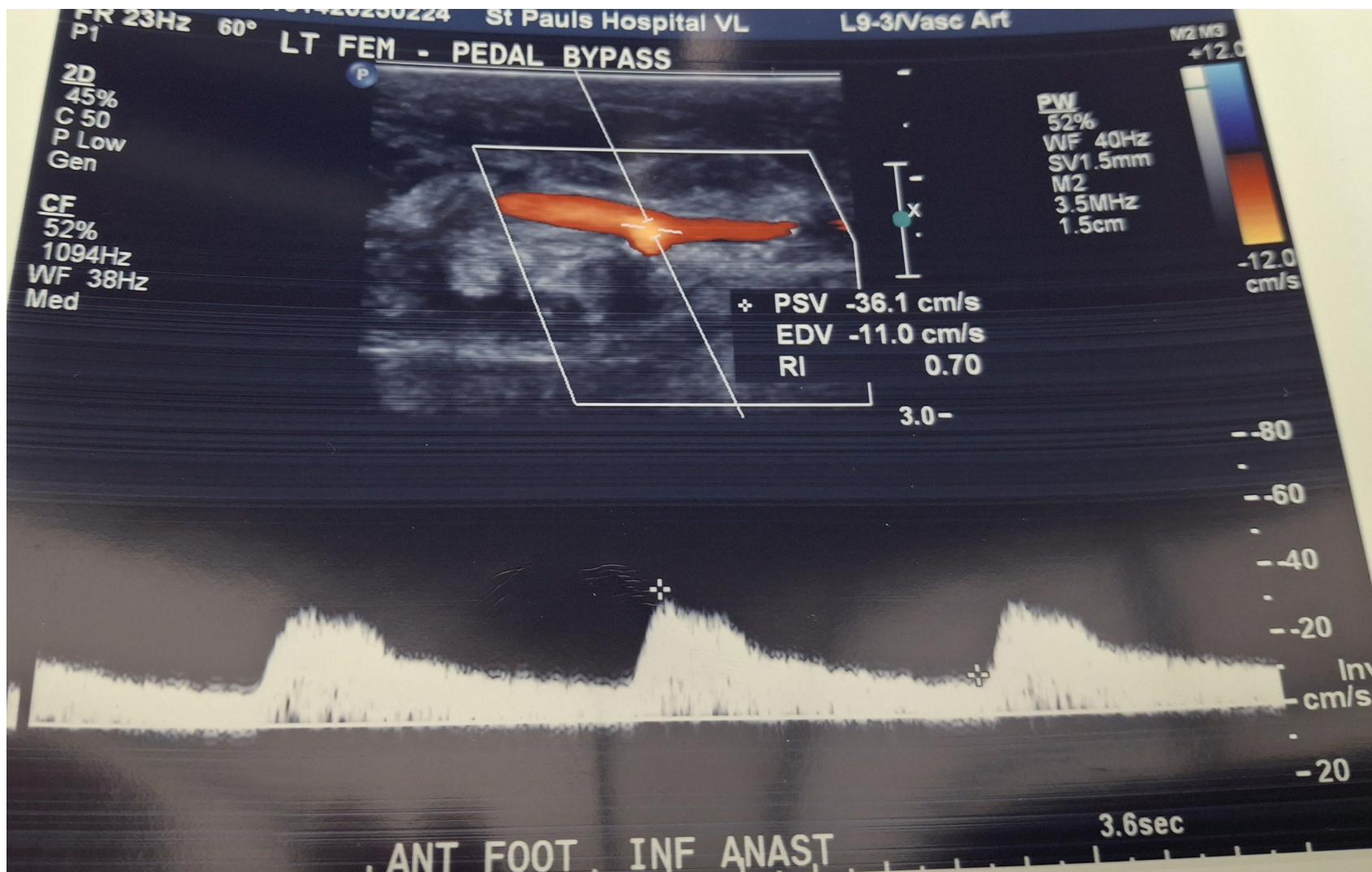
PLAN

- Amputated left 3rd and 4th toes under local, at bedside on admission
- 4th toe was breaking down and thought 48 hour IV antibiotics prior to bypass good idea
- Harvest left GSV
- Bypass from proximal left SFA to left DP (to allow use single segment RSVG)
- My approach
 - Exposed distal pedal vessel first to make sure of reasonable caliber
 - Divided extensor hallucis brevis for exposure
 - Exposed entire GSV – distended and did distal anastomosis first with blow hole
 - Tunneled between heads of gastrocs for length and protection
 - This left a length of GSV maybe 10 cm below SFA origin

OUTCOME

- His toe amputations have healed after Anasept soaks for couple months
- I sent home on prolonged antibiotics – OM course and healed completely
- Now annual vascular lab follow up
 - Lifelong ASA for graft patency (maybe Xarelto 2.5 mg BID given CAD?)
 - ABI 0.4 (2 years out) but patent bypass and was 0/no flow before
 - Toe amputation sites well healed
 - Foot feels warm, foot pain resolved immediately post op
 - Now an independent 90 year old man 2 years out pedal bypass





IS THIS A COMPLEX CASE?

NATIONAL TRENDS IN PEDAL BYPASS SURGERY

- Complex aortic cases often presented but pedal bypass not universal
 - USA but
 - Low volume (centers) < 2 /year
 - Medium 2-4 /year
 - High Volume > 4 /year – only 7% of centers
 - We did 38 “femoral – pedal bypasses” during calendar year 2023 at St Paul’s in Saskatoon
 - A Pedal Bypass is not a fem pop at one year
 - 65% Primary Patency
 - 80% Secondary Patency
 - 83% Limb Salvage
 - Despite good outcomes, that are center volume dependent, PB surgical volume down 4 x
- National trends and outcomes of pedal bypass surgery. Chamseddine H, Shepard A et al. Journal of Vascular Surgery, Volume 81, Issue 1, 173-181.e4

QUESTIONS?