Perineal Reconstruction: Putting it all back together

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Disclosures

Nothing to disclose.

All photos in this presentation are from articles.

- It's hard for me to remember to take pictures in OR anymore!
- No one really wants before/afters of their buttock like they do for other surgeries we perform in plastics

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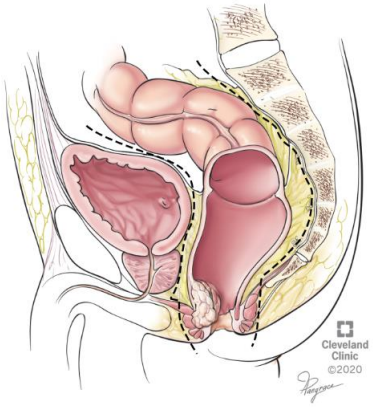
Why do we need perineal reconstruction?

1. Abdominal perineal resection
   - Often patient receive neo adjuvant chemo-radiation. If there is evidence of persistent disease an APR is recommended for definitive treatment
   - Once the soft tissues become irradiated, obtaining long lasting durable closure can be difficult
   - Bringing in tissue fill the “dead space”

2. Reconstruction other anatomy taken with an APR
   - Posterior wall vaginectomy for more invasive cancers

3. Fistual
   - Crohn’s can have significant extent of tracking, when doing a procto-colectomy tissue loss may occur



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Why do we need perineal reconstruction?

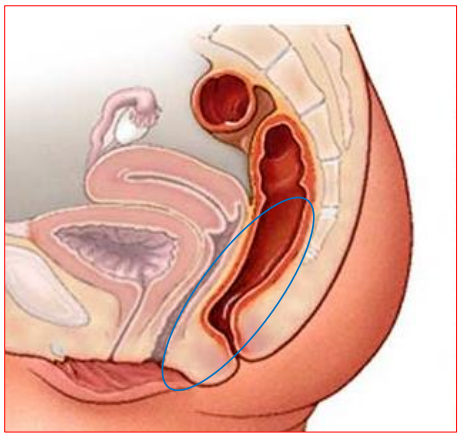
Bottom line- no pun intended

We want to prevent:

- Wound healing problems

- Reconstruct normal anatomy

- Prevent pelvic floor herina



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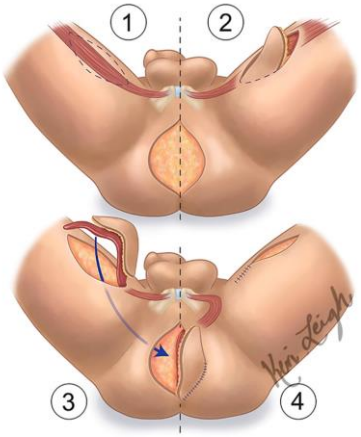
Traditional Options for Recon

1. Bilateral Gracilis Muscle Flaps
   - Why:
     - Bringing in healthy tissue from the leg that has not seen radiation
     - Muscle flaps that can better deliver bloody supply to the radiated field
       - Abx delivery, neo-vascularization
   - Why not:
     - Variable in bulk depending on body habitus of patient
     - Consistent vascular pedicle, but some patient's anatomy can limit rotation of flap resulting in less reach
       - In my hands- this is just a pain to dissect.
     - Large scars on the leg
     - Secondary donor site
     - If taken with a skin paddle, can be un-reliable.



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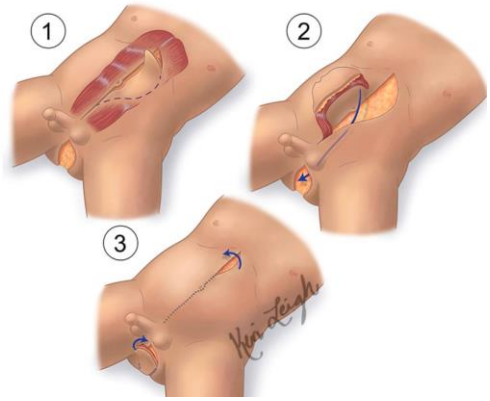
Traditional Options for Recon

2. Vertical Rectus Abdominus Myocutaneous Flap
   - Why:
     - Can give a large area of bulk and has reliable skin paddle
     - Good for stuffing the hole with vascularized tissue
     - Can recon the posterior wall of the vagina easily
     - For open cases, you're right there
   - Why not:
     - Donor site morbidity
       - Taking the whole rectus on one side can lead to bulges and hernias
     - Requires an open approach for APR



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Why I no longer do these flaps:

-- I found something that works better in my hands and has less morbidity.

-- Changing methods of APR- mostly done robotically

--have made VRAM less desirable.

-- I dislike the gracilis flap dissection and lack of bulk for inset

…. So what do I use?

1. Bilateral gluteal fasciocutaneous V to Y flaps
2. 3 Flap closure for APR with posterior wall vaginectomy

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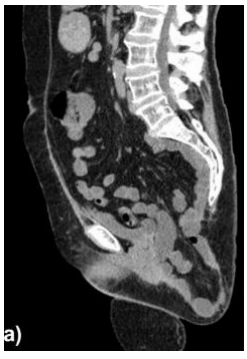
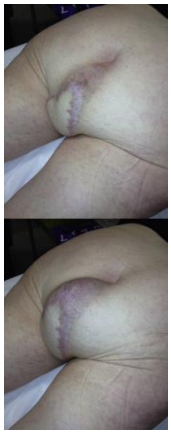
Biologic Mesh to Prevent Perineal Hernia

-Strattice Plaible- cut to fit the defect

-Pie crusted on the back table and then inset to pelvic outlet





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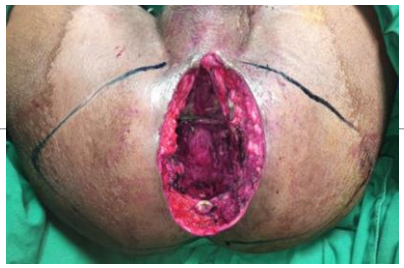
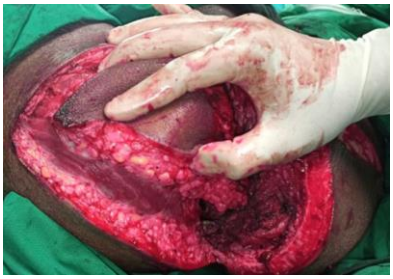
V to Y

Gluteal V to Y can be use as a single flap or bilateral

- Based of perforating vessels from gluteus maximus muscle
- Dissection down to and through muscular fascia
- Elevate medial edge
  - This will get de-epithealized to dunk into defect
- This dissection is FAST
- I prefer to turn prone





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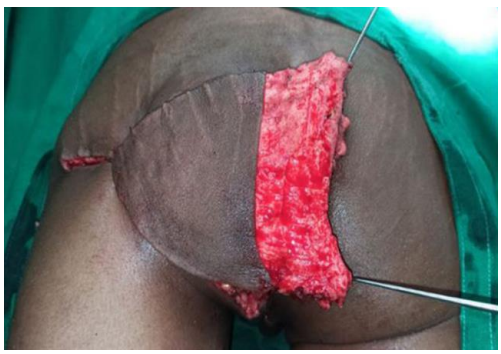
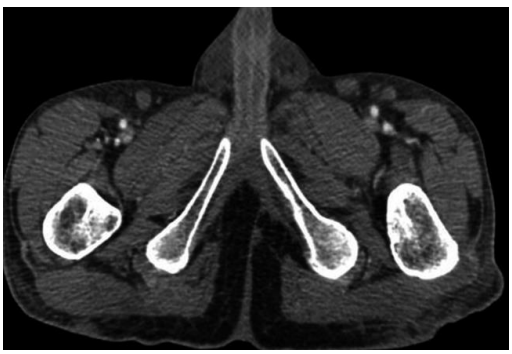
V to Y





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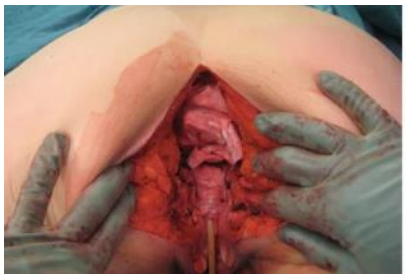
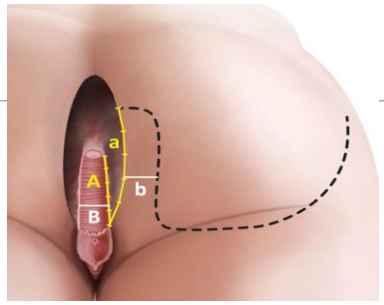
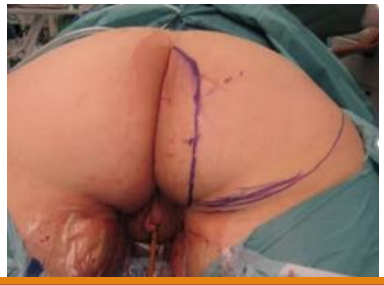
3 Flap closure







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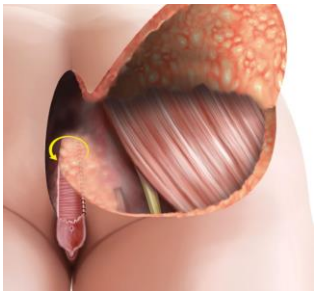

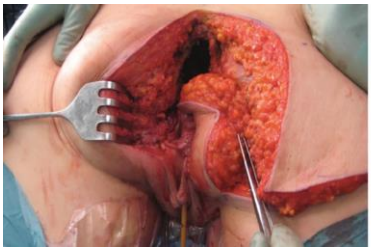

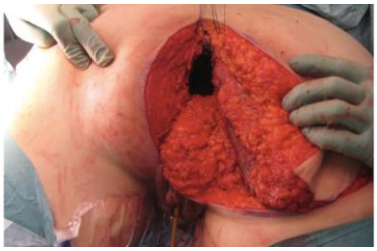

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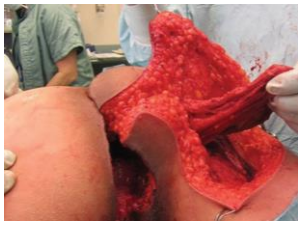
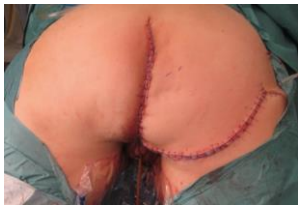
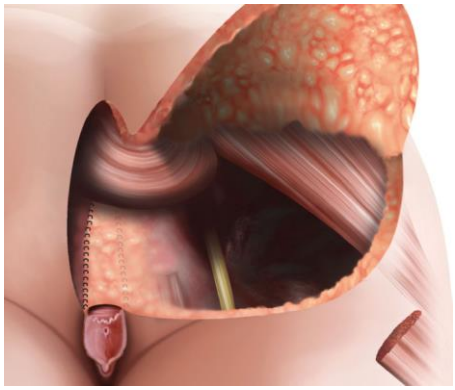
3 Flap Closure







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Post Op Protocol

Always leave drains
- These stay in usually for 2 weeks or more

Antibiotics for 3 days post op due to strattice

Bed rest on POD 0
- Yes, early ambulation is important, but you don't not want a patient trying to get up an midnight and then inadvertently causing a dehiscence to the closure.
- Get up on POD 1 with help of PT.
  - Roll to stand, no sitting directly on buttock, must favor sitting on hip region

For Females- Foley for 1 week to prevent urine contamination

For Male- have the ability to VAC the incision line
- Can't do this for females due to the vaginal opening

NO sitting directly on closure site for 6 weeks!!

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How has it been going?

Time will tell.

- Over this past year 3 patients have undergone the 3 flap closure
  - 1st patient – no significant complications
  - 2nd patient – only complaint is that of scar tissue
  - 3rd patient -- recently post op, too early to tell

- V to Y
  - This is done more frequently
    - N = 7 with only one patient developing post op fluid collection superior to strattice
      - Of note, that patient is a smoker.

No patients have had documented perineal hernias, significant wound healing complications or return to OR for dehiscence

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References

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