A Novel Use of Gracilis Muscle As a "Walking" Flap for Repair of a Rectovaginal Fistula

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Nothing to disclose

Background

- Rectovaginal fistula is a rare but debilitating complication of a variety of pelvic operations
- Management remains challenging
- High incidence of failure
- Majority of patients will require surgical intervention (fecal diversion, local repair, muscle transposition, laparotomy)

Background

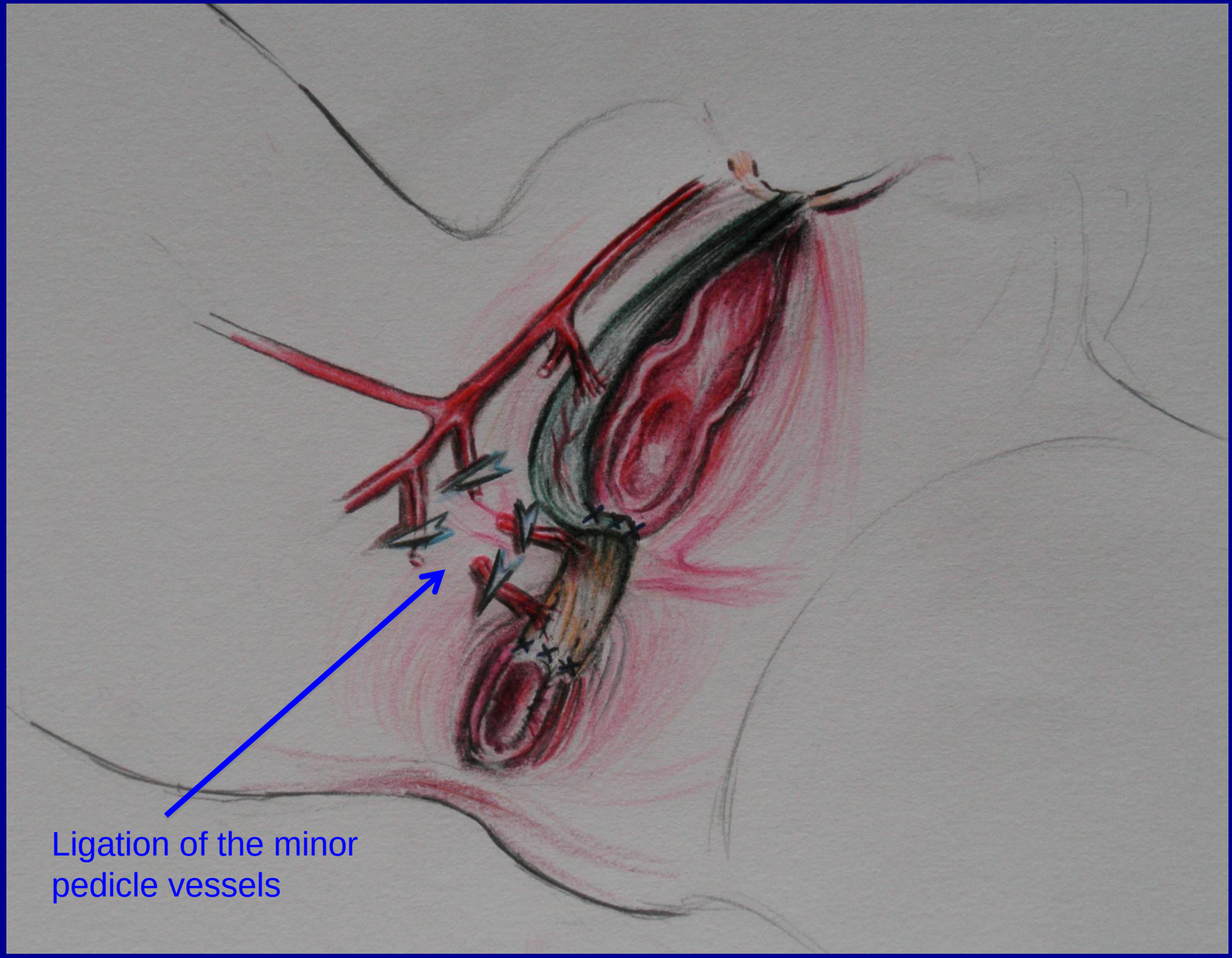
- Amongst the muscles used, gracilis transposition flap is an excellent option
  - Functionally rudimentary muscle, thus expendable
  - Easily mobilized
  - Adequate length
  - Usually well developed in young women
  - Dominant vascular pedicle proximally, ideal for perineal transposition

Background

- Gracilis muscle transposition flap has a high success rate; 60-100%
- In a small percentage of cases it fails
- Other options should be entertained
- We present the first case in the literature using the gracilis muscle as a “walking” flap for repair of a persistent rectovaginal fistula

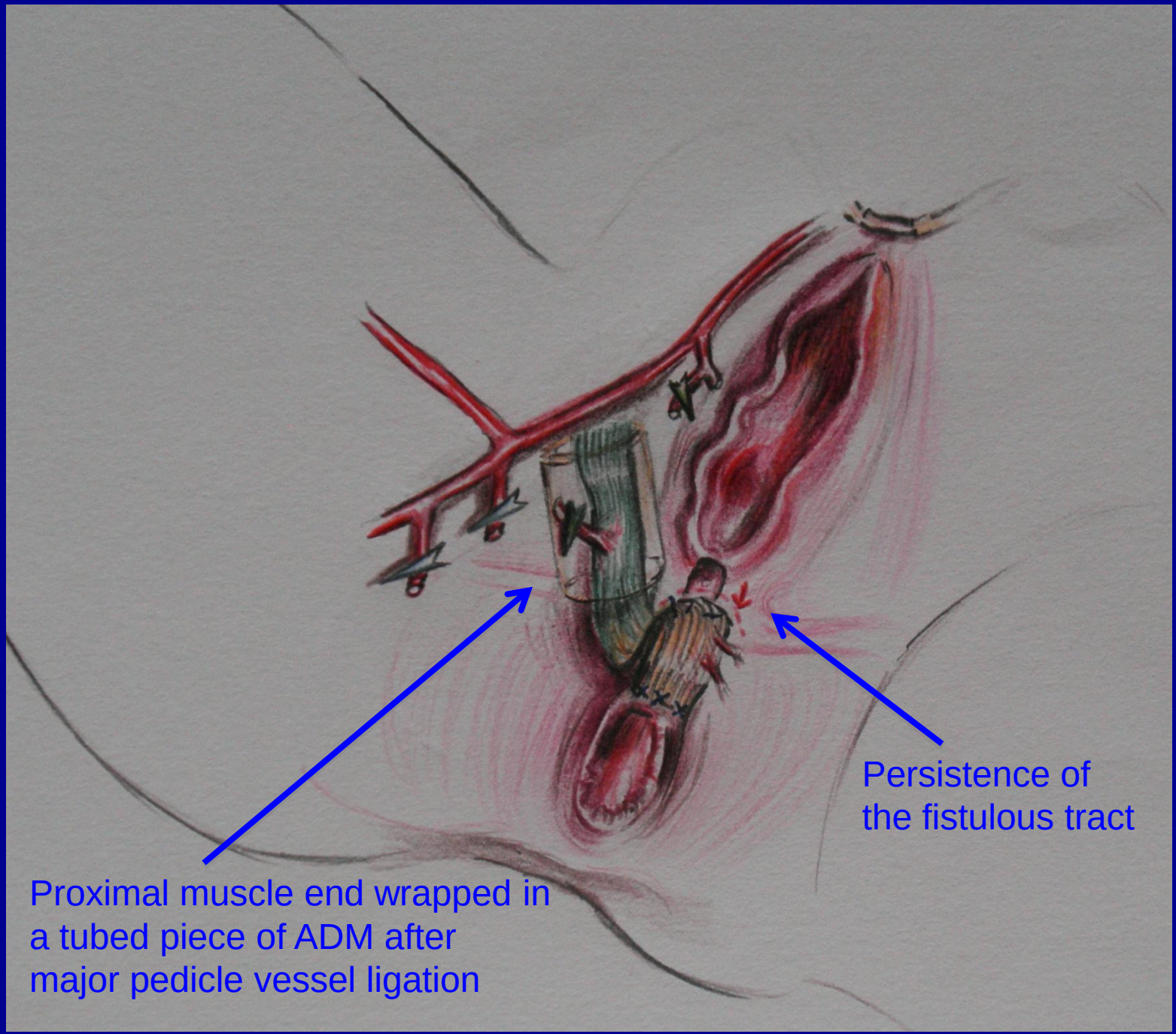
Case Presentation

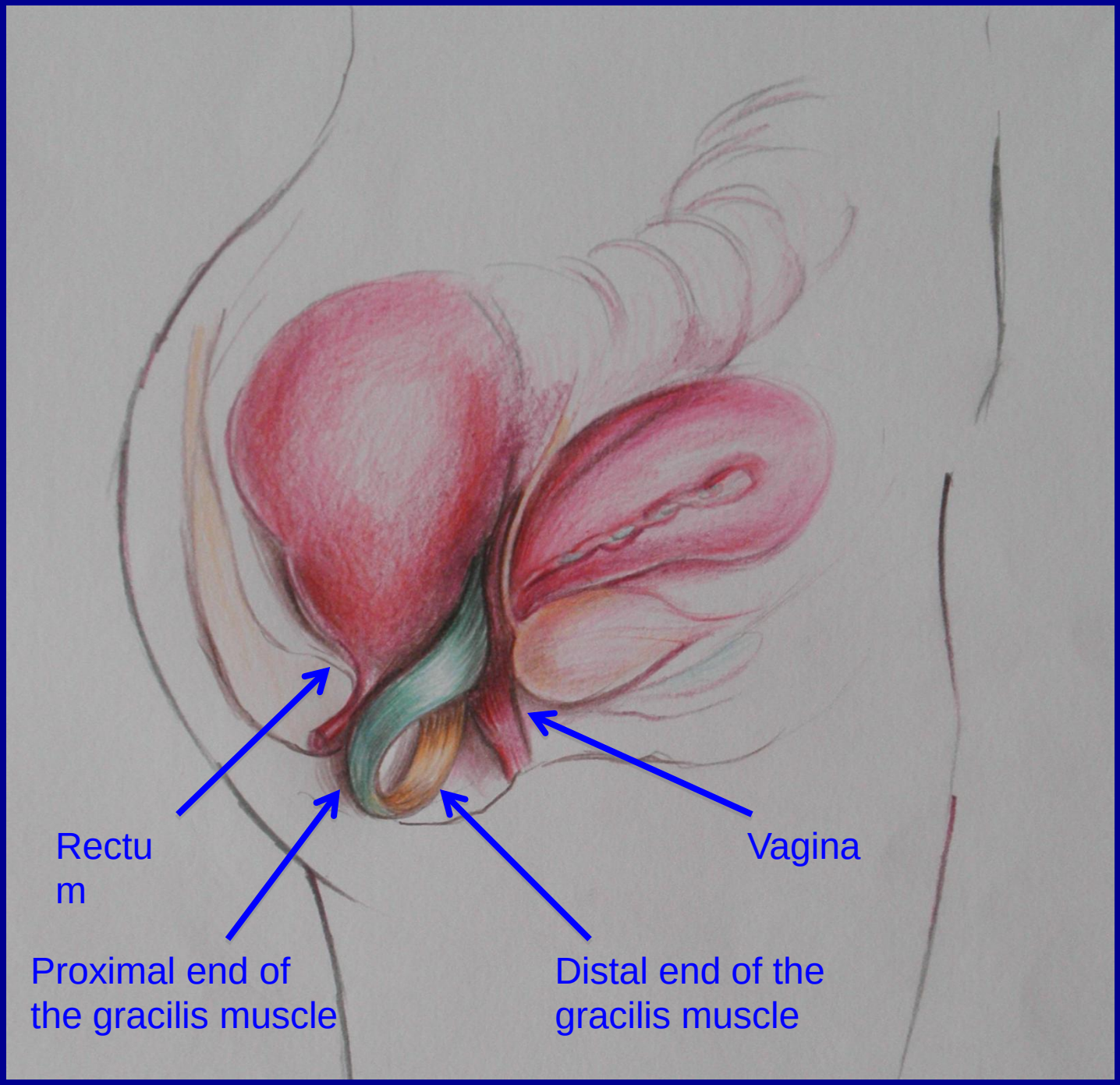
- 50 yo F, otherwise healthy, s/p stapled hemorrhoidopexy presented with 30 mm rectovaginal fistula
- Loop ileostomy for fecal diversion
- 4 months later, EUA showed persistence of the fistulous tract
- Primary closure of the fistula followed by right gracilis muscle transposition flap

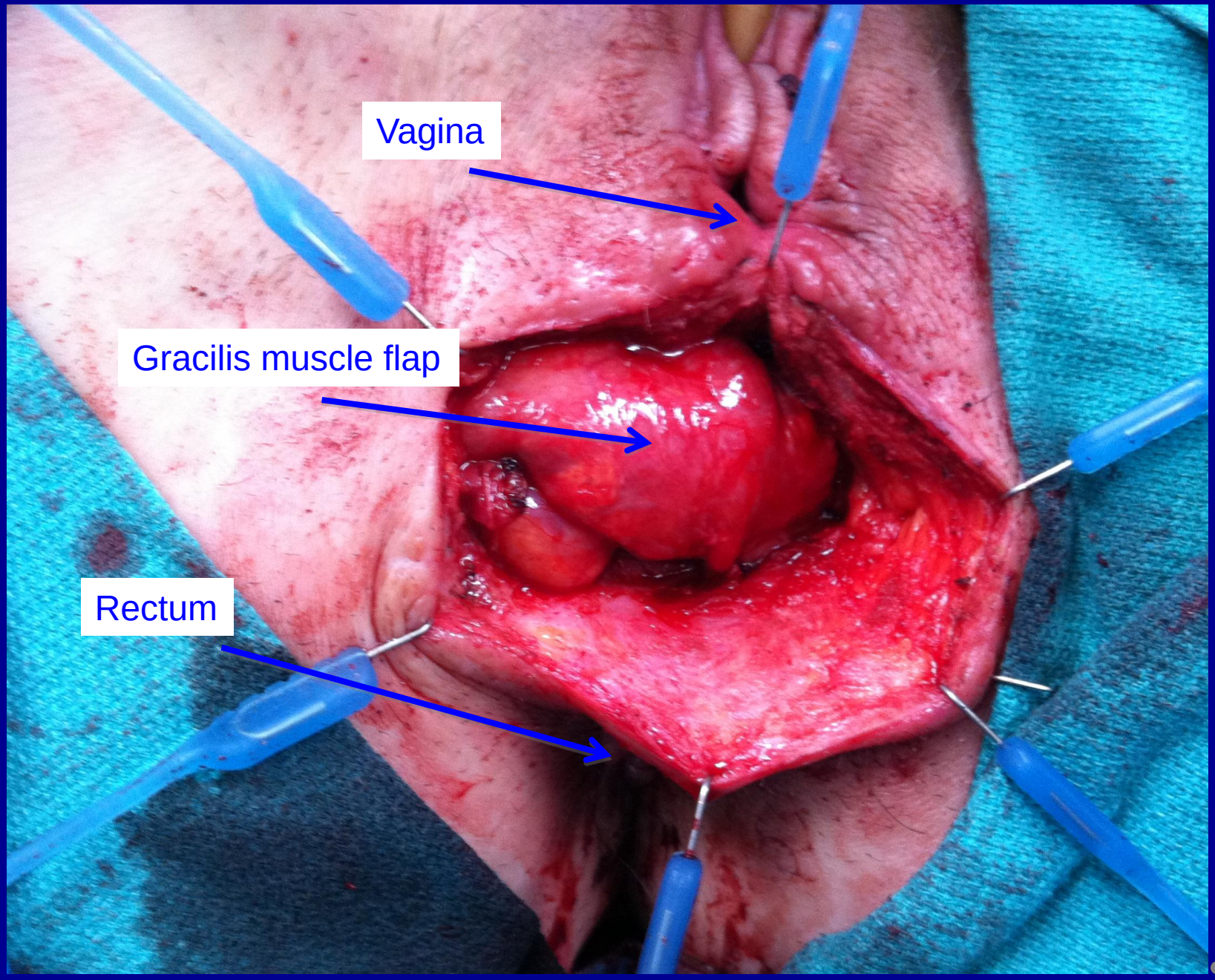

Ligation of the minor
pedicle vessels

Case Presentation

- 3 months later, gastrograffin enema showed no evidence of rectovaginal fistula but patient reported new clear vaginal discharge following the study
- Repeat EUA: Persistence of the fistulous tract, decreased in size from 30 mm to 5mm
- Right gracilis muscle flap was re-used as a “walking” flap


Persistence of
the fistulous tract
Proximal muscle end wrapped in
a tubed piece of ADM after
major pedicle vessel ligation


Rectu
m
Vagina
Proximal end of
the gracilis muscle
Distal end of the
gracilis muscle


Vagina
Gracilis muscle flap
Rectum

Case Presentation

- 3 months later, gastrograffin enema showed no evidence of rectovaginal fistula
- Closure of the loop ileostomy
- 1 year later continues to do well

Discussion

Advantages of gracilis as a “walking” flap

- Defect coverage without additional donor site morbidity
- Preservation of the contralateral gracilis muscle as an alternative in case of 2nd failure

Disadvantage of gracilis as a “walking” flap

- One additional procedure to delay the muscle

Conclusion

"Walking" gracilis muscle flap should be considered as an alternative appropriate treatment for persistent rectovaginal fistula after failure of initial gracilis muscle transposition flap

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