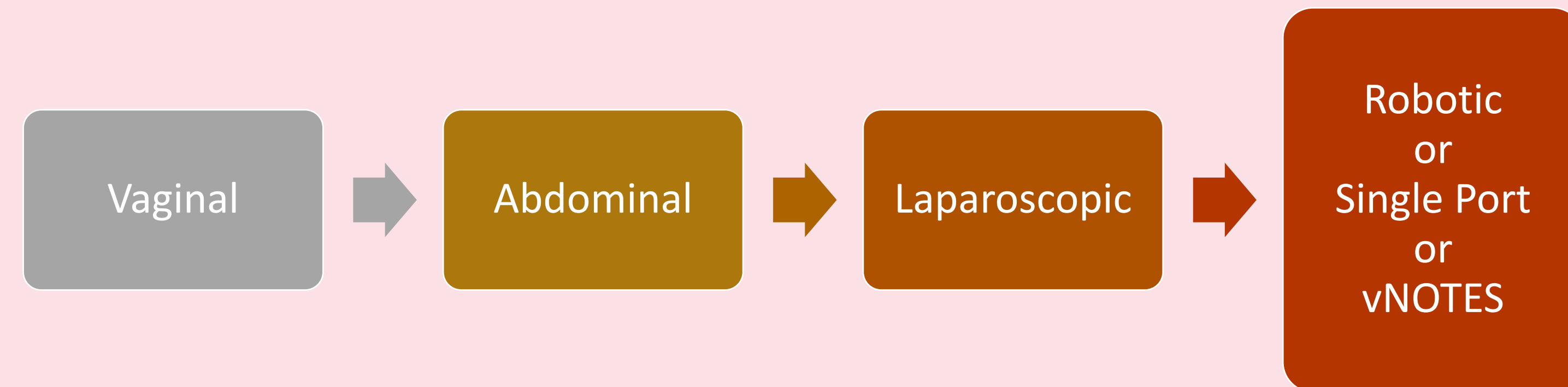


A transvaginal natural orifice transluminal endoscopic surgery (vNOTES) hysterectomy case series

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What is vNOTES?

- A minimal access surgical technique in which insufflation of the abdominal cavity and laparoscopic surgery is conducted through the vagina
- First reported in 2012



Why use vNOTES for Hysterectomy?

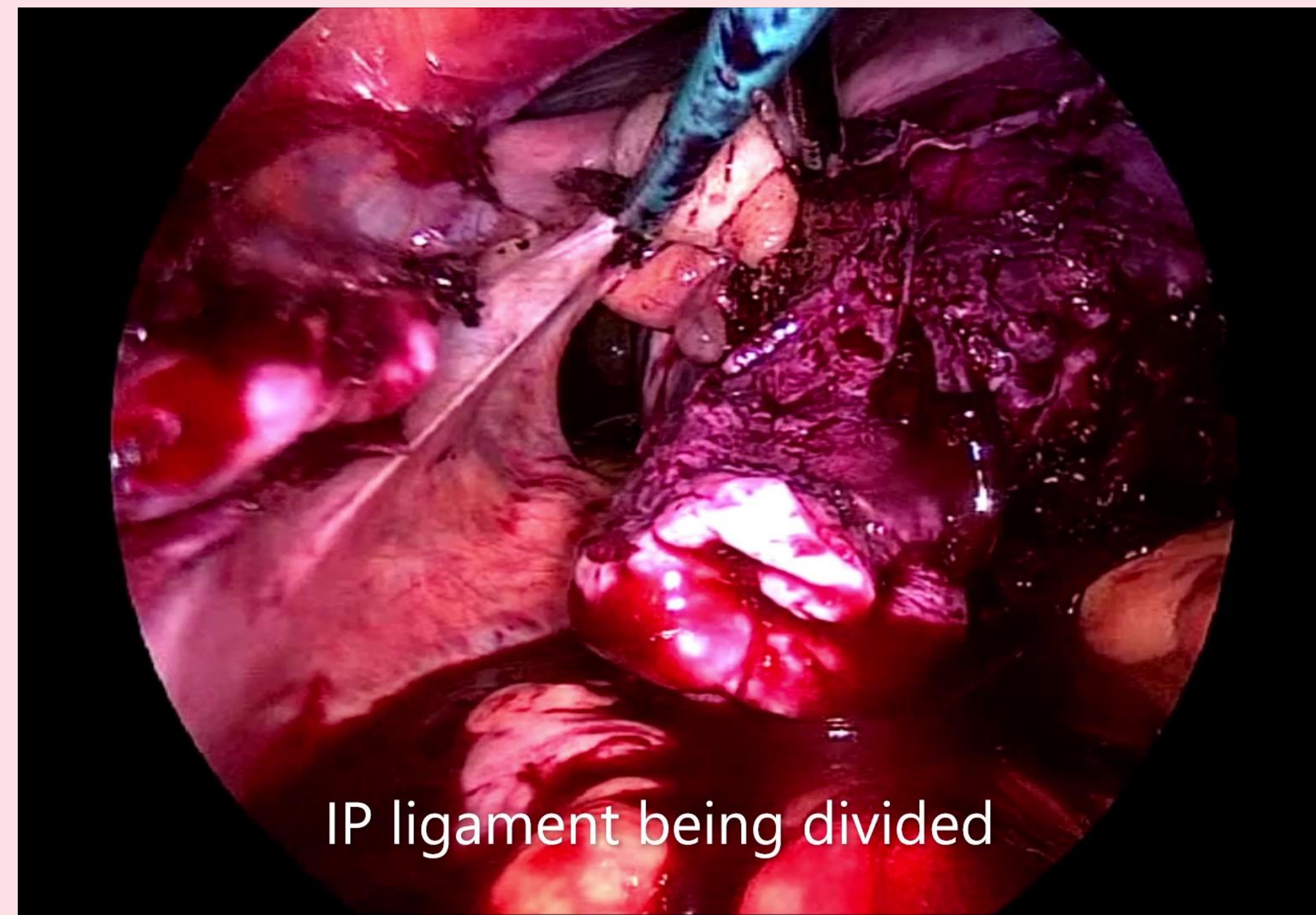
- All the benefits of vaginal hysterectomy (no scars, easy access for prolapse repairs)
- Able to safely operate on the adnexa
- Can remove very large specimens vaginally by dividing within a bag

What do we already know?

- The last systematic review was published on 2020¹, this found vNOTES compared to TLH/ LAVH to be
 - Equally effective
 - Shorter operation
 - Shorter hospital stay
 - Reduced blood loss
- Since then Nulens et al. published specifically on large uteri from 281 to 3361g with good results²
- Housemans et al published a very effective 10 step guide to performing vNOTES hysterectomy³

How to perform a vNOTES Hysterectomy?

- Akin to a vaginal hysterectomy conducted with laparoscopic instruments
- 1) Circumferential incision on the cervix, open the pouch of Douglas and vesicouterine pouch, divide the uterosacral ligaments
 - 2) Introduce an Alexis retractor into the vagina, achieve pneumoperitoneum
 - 3) Move caudal to cranially on both sides until the uterus is free, taking each pedicle in turn and ensuring haemostasis. If performing an oophorectomy take the infundibulopelvic ligament and check haemostasis under vision
 - 4) Remove the specimen transvaginally and close as for a vaginal hysterectomy



Our series

- 34 patients operated on at NCIC, two DGH's in the north of England
 - One converted to TLH BSO due to inadequate cervical descent
 - 13 for endometrial cancer
- Largest specimen by size (intact) 170x200x100mm
- Largest specimen by weight 450g
- Average length of operation comparable to other forms of Hysterectomy within the trust
- Average length did not change significantly over the series but later operations increasingly performed by more junior staff members under direct supervision
- Mean length of stay 1.3 days (day case hysterectomy not offered at trust)
- 1 bladder injury repaired per vagina
- 1 post op infection treated with outpatient antibiotics

Conclusions

- A successful demonstration of vNOTES in a secondary care environment
- vNOTES is a safe approach with comparable outcomes to traditional laparoscopy and vaginal hysterectomy with some potential benefits
- Further studies are undergoing to directly compare vNOTES with vaginal hysterectomy and the use of vNOTES in cancer⁴
- The use of the iNOTES case and complications registry⁵ should be encouraged to advance understanding of the risks and benefits of this procedure

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