



Royal College of
Obstetricians &
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vNOTES Bilateral Salpingo-Oophorectomy: Novel Approach for Ovarian Cancer Prevention in HBOC Carriers

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Introduction

BRCA1/2 mutations significantly increase the risk of ovarian and fallopian tube cancer, making Risk-Reducing Salpingo-Oophorectomy (RRSO) a key preventative strategy. While laparoscopic RRSO is standard, visible abdominal scars may negatively impact body image in BRCA carriers. Vaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES) is an emerging minimally invasive technique offering scarless intra-abdominal access. In our study we aim to demonstrate the use of vNOTES in performing RSSO in our Hereditary Breast Ovarian Cancers (HBOC) HBOC carriers.

Method

A prospective single centre study of **11 patients** with HBOC (n=8) or a strong family history (n=3) who underwent **primary bilateral salpingectomy via vNOTES** over a 12-month period between January-Dec 2024.

Inclusion criteria required no contraindications to posterior colpotomy.

Data collected included:

- Age
- BMI
- Ca-125 levels
- Duration of operation
- Estimated Blood Loss (EBL)
- Length of stay
- Pain score (VAS at 24 hours)
- Intra-/post-op complications (Clavien-Dindo)
- Female Sexual function Index Score (FSFI-6)
- Recovery status (RI-10).Toolkit

vNOTES salpingectomies were performed by using a modified version of Baekelandt *et al* 2021 and as per Polan *et al* 2024 (Image A). Ovaries were excised completely including up to 2cms of ovarian vasculature. Bowel, omentum, appendix and pelvic organs were surveyed and peritoneal washings were taken (Image B),

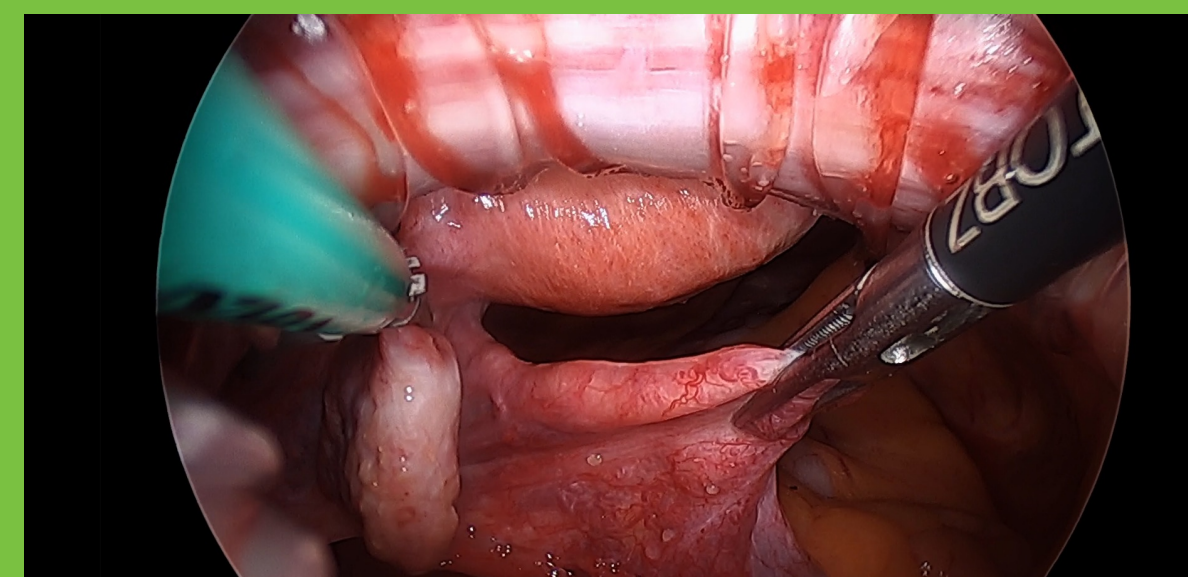


Image A:

Right Salpingo-
oophorectomy via
vNOTES

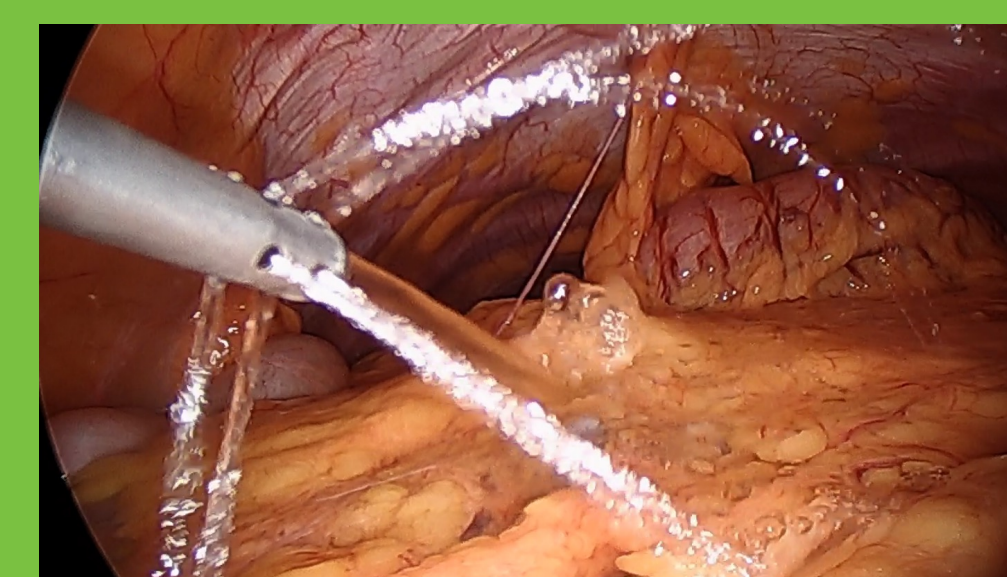


Image B:

Peritoneal
Washings via
vNOTES

Results

- 🧑 **Median age:** 46 years
- 📏 **Median BMI:** 29kg/m²
- 🕒 **Median op time:** 35 mins
- 🏠 **Day case:** 100% same-day
- 🔄 **Conversions:** 0

- ⚠️ **Complications:** 0
- ✅ **Histology:** Confirmed complete tube removal in all
- VAS pain pain score at 24hrs: 2
- Resuming normal activity: < 3 days
- FSFI-6 pre-and post- procedure: Similar

Discussion

- Our series demonstrates that **vNOTES offers a scarless, minimally invasive alternative** with faster recovery, low pain, and stable post-operative sexual function.
- Although vNOTES has been widely adopted for various gynaecological procedures, evidence specific to its use in RRSO remains limited.
- We adhered to NCCN guidelines by ensuring complete adnexal removal with appropriate margins and conducting peritoneal washings and thorough cavity inspections. These steps are essential to minimise the risk of occult malignancy, particularly given reports of residual ovarian tissue and hidden tubal carcinoma in situ in previous studies.
- Our findings support existing data showing **low morbidity, minimal blood loss, and oncological safety**. However, limitations include restricted visualisation of the anterior peritoneum and the need for advanced surgical expertise.

Conclusion

vNOTES is a safe and effective alternative to conventional laparoscopy for RRSO in BRCA mutation carriers. It offers oncologically sound resection with improved cosmetic and recovery outcomes, which may enhance acceptability among patients hesitant about prophylactic surgery. Long-term effects on sexual function and quality of life, especially in premenopausal women, warrant further study. Larger comparative trials are needed to validate these findings and guide optimal patient selection.

Acknowledgements

I would like to thank Mr Wai Yoong, and the rest of the co-authors for their hard work and support in this project.

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