



Royal College of
Obstetricians &
Gynaecologists

Assessing the Safety of hysteroscopic morcellation at Oxford University Hospital



Oxford University Hospitals
NHS Foundation Trust

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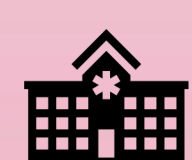
Introduction & Objective

Hysteroscopic morcellation of submucosal uterine fibroids or endometrial polyps has a theoretical risk of disseminating malignant tissue through uterine perforation or retrograde flow through the fallopian tube. This risk is theoretical, in contrast to the recognized risk of dissemination in laparoscopic morcellation of fibroids, in which the morcellation takes place within the endometrial cavity.¹

We evaluated our current practice of hysteroscopic morcellation for:

- Provision of safe and effective treatment to patients with regards to complications and dissemination of malignancy.
- Rate of complete treatment in one clinic appointment.
- Identifying areas of improvement.

Design: Retrospective Trust-wide Departmental Audit. Data was collected over 6 months. The hysteroscopic morcellation procedures were performed by 6 clinicians at 2 hospital sites.



April – Sept
2021

6 x



Methods

Data was collected from the Trust's Electronic Patient Record system (Millennium Cerner) and analysed using NICE's interventional procedure Outcomes Audit Tool.

Inclusion criteria:

Outpatient hysteroscopic procedures performed under local anaesthetic for:

- symptomatic intrauterine polyps
- type 0/ type 1 submucous fibroids < 30 mm.

Exclusion criteria: Hysteroscopic morcellation performed under general anaesthesia or size of polyp/fibroid >30 mm.

Results

A total of 85 women with mean age of 57 (28 – 80 years) were included. Of these, 56.4% (48) of women were postmenopausal, 28% (24) pre-menopausal and 15% (13) perimenopausal. BMI ranged between 20 – 48, with the majority (37 – 68.5%) over 30.

The main **indications** for intervention were:

- abnormal uterine bleeding
- subfertility
- dysmenorrhoea

The complete removal rate of polyp/fibroid tissue using hysteroscopic morcellation was 96.47%.

Incomplete removal occurred in 3 (3.5%) cases, represented by large benign submucous fibroids subsequently removed by TCRF.

We did not identify any intra- or peri-operative complications such as excessive bleeding, infection, perforation or fluid overload².

These findings are consistent with the NICE literature review on the efficacy and safety of hysteroscopic morcellation.¹

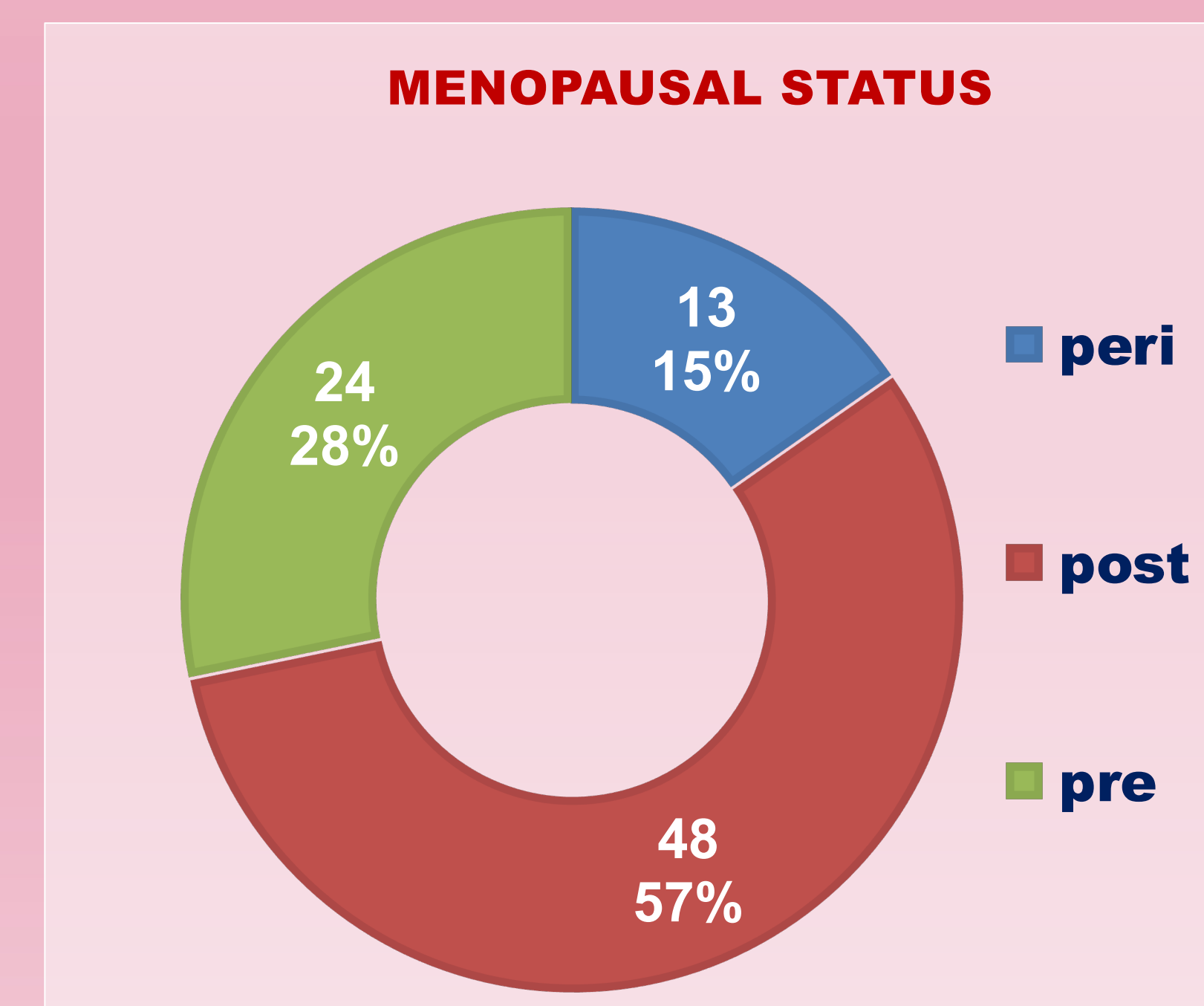


Figure 1. Distribution by menopausal status

96%
complete
resection



94%
treated at
1st
appointment

HISTOPATHOLOGY

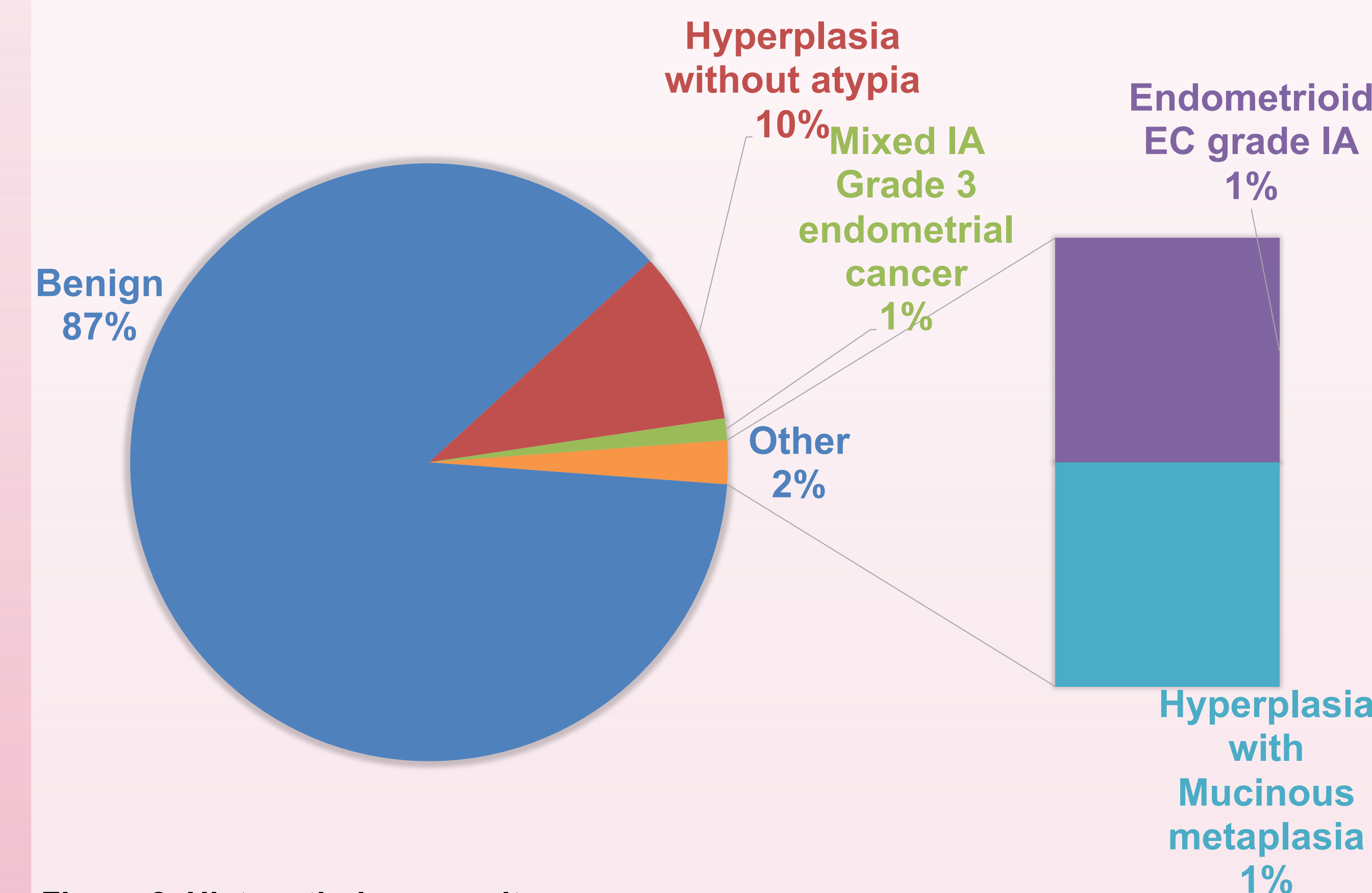


Figure 2. Histopathology results

Summary of pathology:

- Benign endometrial tissue in 87.05% (74/85)
- Endometrial hyperplasia without atypia in 9.41% (8/85)
- Endometrial hyperplasia with mucinous metaplasia in 1 case

• Two cases of endometrial cancer (2.35%)

- Low grade endometrioid endometrial cancer FIGO Stage IA Underwent TLH + BSO.
- Mixed endometrioid and serous adenocarcinoma of endometrium (FIGO IA Grade 3) with synchronous right ovarian adenocarcinoma (IA Grade 2). The patient underwent TLH + BSO + BPLND followed by pelvic radiotherapy and chemotherapy.

On follow-up at 6 and 12 months there was no evidence of metastatic disease or malignant dissemination.

Five out of 85 patients (5.88%) needed subsequent surgery: 2 x LTH + BSO and 3 fibroid resections (TCRF) under general anaesthesia.

For all cases of hyperplasia without atypia, patients were booked for repeat biopsies in 6 months and offered oral progestogen/LNG-IUS.

Conclusion

Hysteroscopic morcellation of polyps and small fibroids is a **safe** procedure (complication rate < 0.1%) with **high success rates** (96.47%).

No dissemination of malignant tissue occurred in our cohort.

It is cost effective as it does not require theatre staff/resources or inpatient stay.

General anaesthesia is avoided.

Recommendations

- Encourage one-stop practice of hysteroscopic morcellation at the initial appointment;
- Improve the rates of submucous fibroid removal in the outpatient setting by organising further training;
- Consider auditing recurrence rates, long-term outcomes and rates of pregnancy as well as NICE guidance compliance with registration of patients and practitioners.

References

1. NICE Interventional procedures guidance 704 published August 2021
2. BSGE /ESGE guideline on management of fluid distension media in operative hysteroscopy 2016

Declaration of interests - No competing interests.

BPLND – Bilateral pelvic lymph node dissection
BSO – Bilateral salpingo-oophorectomy
TCRF – Transcervical resection of fibroids
TLH – Total laparoscopic hysterectomy
LNG –IUS – Levonorgestrel Intrauterine System