The Incidence of Malignancy and the Preoperative Assessment of Women Undergoing Hysterectomy with Morcellation for Benign Indications

Gianna L. Wilkie
*University of Massachusetts Medical School*

*Et al.*

Let us know how access to this document benefits you.
Follow this and additional works at: [https://escholarship.umassmed.edu/ssp](https://escholarship.umassmed.edu/ssp)

Part of the [Female Urogenital Diseases and Pregnancy Complications Commons](https://escholarship.umassmed.edu/ssp), [Neoplasms Commons](https://escholarship.umassmed.edu/ssp), [Obstetrics and Gynecology Commons](https://escholarship.umassmed.edu/ssp), [Oncology Commons](https://escholarship.umassmed.edu/ssp), and the [Women's Health Commons](https://escholarship.umassmed.edu/ssp)

**Repository Citation**
Wilkie, Gianna L.; Reus, Emily; Leung, Katherine G.; Bradford, Leslie; Manning, Mark; and Moore Simas, Tiffany A., "The Incidence of Malignancy and the Preoperative Assessment of Women Undergoing Hysterectomy with Morcellation for Benign Indications" (2016). University of Massachusetts Medical School. *Senior Scholars Program*. Paper 238.
[https://escholarship.umassmed.edu/ssp/238](https://escholarship.umassmed.edu/ssp/238)

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in Senior Scholars Program by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.
Hysterectomy is one of the most commonly performed surgical procedures in the U.S., with minimally invasive approaches being preferred.

The use of power morcellation in gynecologic surgery has come under scrutiny secondary to concerns for occult malignancy dissemination.

The incidence of undiagnosed gynecologic malignancy when hysterectomies are performed for benign indications is not definitive but has been quoted as high as 2.7% (1:37).

There is no standard recommended preoperative evaluation, and variation is anticipated by preoperative complaint or diagnosis.

There was no significant difference in current cervical cytology (68.9% vs. 71.3%) and imaging (39.6% vs. 34.9%) rates between the non- versus morcellated groups; however those experiencing morcellation were less likely to have preoperative pathologic endometrial assessment (21.7% vs. 34.2%, p<0.001).

The incidence of malignancy on final pathology was 2.1% and was different between non-morcellated versus morcellated specimens (2.5% vs. 0.3%, p<0.001).

No Morcellation

Final Pathology
Benign
Pre-cancerous
Malignant

Morcellation

Pre-operative Evaluation

Results

No Morcellation

Total Population
1,936
396

Morcellation (n=396)
390 (98.5%)
161 (8.3%)

No Morcellation (n=1,936)
1,727 (89.2%)
48 (2.5%)

Table 1.

CONCLUSIONS

The incidence of malignancy at time of hysterectomy performed by non-oncology trained gynecologists was 2.1% overall, and 0.3% in morcellated cases.

The pre-operative evaluation of patients undergoing hysterectomy with morcellation was similar to those without morcellation, except for lower rates of pathologic endometrial assessment by dilation and curettage or endometrial biopsy.

The lower rates of endometrial assessment seen in the morcellation group can be explained by the fewer chief complaints of abnormal uterine bleeding and more pre-operative diagnoses of pelvic organ prolapse.

An argument could be made that a pathology assessment is indicated in the group undergoing hysterectomy with morcellation due to risk of dissemination in the case of occult malignancy.

The risk of occult malignancy is rare, but this should be discussed with patients and taken into account during the pre-operative evaluation.

REFERENCES

