

Introduction of the Myosure[®] LITE in an established outpatient hysteroscopy clinic

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BACKGROUND

Endometrial polyps are a common cause of abnormal uterine bleeding, as well as often being an incidental finding on ultrasound assessment for other pelvic complaints.⁽¹⁾

Current guidelines recommend complete removal of the polyp for histopathologic diagnosis.⁽²⁾

The Myosure LITE (Hologic, Marlboro MA) is an intrauterine morcellation device used to resect endometrial polyps and small fibroids (<3cm) in an inpatient or outpatient setting.

Impact of the use of the the Myosure LITE in an outpatient setting remains underreported.

OBJECTIVE

To assess the utility, acceptability and cost benefits of the introduction of the Myosure into an established outpatient hysteroscopy (OPH) clinic.

METHODS

All women presenting for outpatient hysteroscopy (OPH) at the Mercy Hospital for Women are prospectively entered into a secure clinic database.

Analysis of this database was performed comparing three time-periods:

1. Pre-introduction and trial phase of the Myosure (July 2015-June 2016);
2. Early use of the Myosure (July 2016-June 2017);
3. Established use (June 2017-July 2018)

Outcomes were related to:

- **Utility:** (1) median [25th - 75th percentile] number of days between clinic appointment and definitive treatment, (2) whether or not a further hysteroscopic procedures (inpatient/outpatient) was required, and (3) duration from initial consultation to treatment of pathology
- **Acceptability:** mean [SD] pain rating using a visual analogue score (VAS) from 0 (no pain) to 10 (severe pain), and whether or not women would repeat the procedure as an outpatient
- **Cost benefit:** comparing net costs of outpatient and inpatient hysteroscopic management of endometrial polyps performed by summation of all costs associated with a procedure – personnel, technology, pharmacy, pathology, and loss of income for the patient

RESULTS

- 872 underwent OPH within the study period, with 337, 271 and 264 in each time period respectively
- 238 (27.3%) attending OPH had endometrial polyp(s), with 69, 85 and 84 in each time period respectively
- Mean [SD] age: 47.0 [9.5] years. 45.8% pre-menopausal, 16.0% perimenopausal and 38.2% postmenopausal

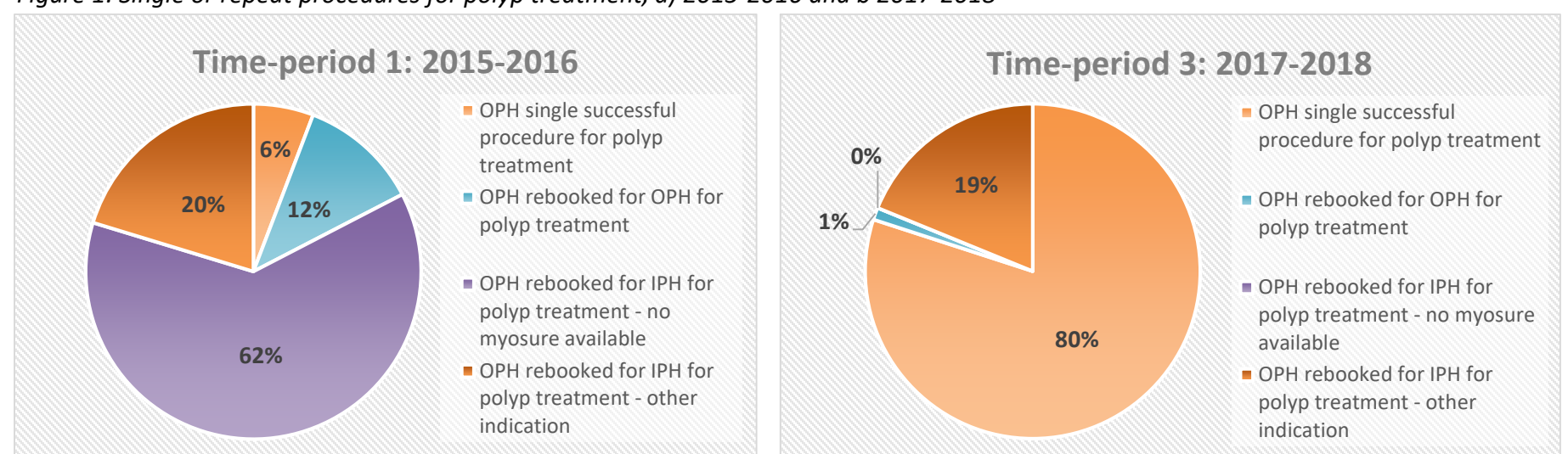
UTILITY:

Table 1: MyosureLITE use, 2015-2018

	Time-period 1:	Time-period 2	Time-period 3
Women attending OPH with an endometrial polyp diagnosed, n	69	85	84
Attempted endometrial polyp resections using Myosure, n	4	61	68
Successful endometrial polyp resections using Myosure, n(%)	4 (100)	58 (95.1)	68 (100)
Patients needing rebooking (any reason), n(%)	65 (94.2)	27 (31.8)	16 (19.0)
Repeat procedures that could have been avoided with Myosure availability, n (%)	51 (73.9)	6 (7.1)	1 (1.2) ¹
Days between outpatient appointment and definitive treatment, median, [25 th -75 th percentile]	56 [24-84]	0 [0-0]	0 [0-0]

¹This patient was re-booked to OPH due to lack of Myosure availability at original OPH procedure

Figure 1: Single or repeat procedures for polyp treatment, a) 2015-2016 and b) 2017-2018



ACCEPTABILITY:

- 86.6% of patients would repeat the procedure
- No serious complications were encountered by any patients

Pain rating:

- The overall pain score for all patients reduced over the three year study period, despite more 'operative' hysteroscopies in the later years.
- Pain scores decreased from median VAS 7.3/10 [2.6] in time period 1 to 5.0/10 [2.9] in time period 3.

COST BENEFIT:

- Overall, OPH was approximately 900AUD less expensive than inpatient hysteroscopy per case
- Given the WIES (weighted inlier equivalent separation) payments are equal for in- and outpatient hysteroscopic treatment of polyp, performance of an outpatient polypectomy with MyosureLITE is highly cost effective
- Moreover, for the patient, an inpatient hysteroscopy represents the loss of 2 days (~440AUD) income, whereas an outpatient hysteroscopy represents a 110AUD loss of income

CONCLUSION

Routine use of the Myosure is effective, feasible, safe, and acceptable to women. Provision of this device in outpatient service saves theatre time and treatment costs and allows a more direct throughput from presentation to treatment.

REFERENCES

- (1) Dreisler E, Stampe Sorensen S, Ibsen PH, Lose G. Prevalence of endometrial polyps and abnormal uterine bleeding in a Danish population aged 20–74 years. *Ultrasound Obstet Gynecol.* 2009 Jan 1;33(1):102–8.
- (2) Gallos I, Alazzam M, Clark T, Faraj R, Rosenthal A, Smith P, et al. Management of Endometrial Hyperplasia. Green-top Guideline No. 67. 2016