



RANZCOG STATEMENTS



Title	Guidelines for endometrial ablations
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Background

Hysteroscopic endometrial ablation has been used as an alternative to hysterectomy for treatment of menorrhagia since 1989 in Australia. The operation requires special surgical skills, which are known to be associated with a steep learning curve. The uptake over the last ten years has not been as prolific as expected. The surgical manufacturing industry has turned its attentions to the development of “global” ablation systems, which have a shorter learning curve to acquire skill in their use.

Although endometrial ablation, in all its forms, is classified as minimally invasive surgery, it is, by no means, minor surgery. Many serious complications and even death have resulted from this procedure. Guidelines to ensure minimum standards of training in these newer techniques are required.

It is recommended that gynaecologists do not perform this procedure unless they have undertaken the training outlined in these guidelines and that the procedure only be performed in hospitals with equipment described.

The following guidelines have been reviewed by the Australian Gynaecological of Endoscopy Society and recommended to the Royal Australian and New Zealand College of Obstetricians and Gynaecologists. All gynaecologists should fulfil the guidelines before embarking on this type of surgery. In general, it is expected that the gynaecologists would be formally accredited to undertake this procedure by an appropriate hospital credentialling committee.

Should any gynaecologist currently performing this procedure not meet the training requirements, it is requested that they be strongly encouraged to undertake further supervised training as soon as possible.

Training Requirements:

1. Good diagnostic hysteroscopy skills (preferably more than 100 procedures). This is often obtained at Registrar level.
2. Training in endometrial ablation requires hands on experience, under supervision, with a normal sized anteverted uterus in the first instance.
3. Training will be effected by observing a number of cases, performing further cases under supervision and then performing cases without supervision. For recently graduated Fellows, this level should be achieved at Registrar level. Alternatively, attendance at training sessions, as outlined in Point 2, is recommended.
4. Initial learning curve probably depends both on the technique used and natural ability and caution of the surgeon. At least five cases should be observed before starting. The following should be regarded as the absolute minimum experience required under the supervised training phase:- Resection – 10 cases, Rollerball – 5 cases, global systems including MEA - 5 cases. The full learning curve is much longer than this and some surgeons never develop a coordination to carry out a difficult case as well.
5. Training of nursing and other members of the operating theatre team is also essential. This is a crucial area.
6. Experienced operators acting as supervisors for endometrial ablation training should have completed at least 50 cases which include technically difficult cases and uterine abnormalities.
7. Gynaecologists training in endometrial ablation should have a nominated supervisor who is well recognised as having adequate experience and skill in the field.
8. The gynaecologist should be aware of all the potential complications of the procedure, in particular the risk of fluid overload. Nursing staff should be instructed to monitor excess fluid loss and report it to both the surgeon and the anaesthetist. Any fluid imbalance of > 1000 mls should be considered significant.
9. Difficult cases should only be attempted by the experienced surgeon. These include the markedly retroverted uterus, the large uterus (> 10 cm in length), the presence of sub mucus or intra uterine fibroids, the nulliparous uterus and the congenitally abnormal uterus. These cases would generally be considered for the new techniques for endometrial ablation such as such microwave endometrial ablation (MEA) or other global system.
10. Sub mucus or intramural fibroid removal should not be attempted during the course of endometrial ablation until the operator is totally comfortable with the primary procedure.

Equipment Requirements:

1. Hystero resectoscope with loops and rollerballs.
2. Diathermy unit providing accurate mix of coagulating and cutting current.
3. High intensity light source.
4. Video camera and monitor.
5. Fluid inflow and outflow systems (gravity feed or electronically controlled inflow/outflow system).
6. Full operating theatre facilities, including equipment and staff necessary for urgent laparotomy and an anaesthetist of sufficient experience to recognise and deal with early signs of fluid overload.

Indications for Endometrial Ablation:

Generally, endometrial ablation is indicated for dysfunction of uterine bleeding where there is no detectable extra uterine pathology in women with average sized uterine cavity and an anteverted uterus. There are a number of relative or absolute contraindications to performing endometrial ablation. These include: -

1. Large uterus (> 10 cms).
2. Markedly retroverted uterus.
3. Nulliparous or congenitally abnormal uterus.
4. Sub mucus or intra uterine fibroids.
5. Moderate or severe adenomyosis.
6. Endometriosis.
7. Post menopausal uterus.
8. Endometrial malignancy.

Primary Complications:

1. Fluid overload.
2. Uterine perforation.
3. Haemorrhage.
4. Damage to other organs, including bowel, ureter, great vessels.
5. Post operative infection.
6. Embolism.
7. Death.

Gynaecologists should also be aware there are secondary complications associated with the procedure, including: -

- Severe pain
- Haematometra

Sub Mucus and Intramural Myomas:

These should not be attempted without considerable experience of endometrial ablation in the normal uterus. The risk of uterine perforation, haemorrhage and fluid overload is considerably increased compared with the normal uterus. Sub mucus myomas should not be resected unless more than 50% of the myoma is visible from the cavity. Initial myoma resections should be carried out under supervision and should preferably be on myomas of < 3 cm. Surgery should not be attempted on myomas of > 5 cm. diameter. The operator is encouraged to obtain further information from standard text books on this subject.

Pre Operative Counselling:

Counselling should be adequate and realistic and an information sheet should be given pre operatively. True informed consent should be obtained by the surgeon performing the procedure and should not be delegated.

Endometrial Preparation:

It is strongly recommended that the endometrium is prepared with appropriate hormonal therapy before all forms of endometrial ablation.

Follow Up:

It is generally recommended that patients should be followed up after six weeks and again in another six months. Longer term follow up is advisable to assess the final outcome of the procedure.

Quality Assurance:

Recording of operative complications should take place and be reviewed by the relevant QA committee. Prospective auditing, including indications for the procedure, immediate and long term outcomes, are recommended.

Pregnancy and Ablation:

Pregnancy has been reported following endometrial ablation. The predicted morbidity is that of pregnancy occurring in a patient with Asherman's syndrome. It carries a morbidity of approximately 40%.

It is therefore recommended that sterilisation is offered to the patient or she is advised to use protection against future pregnancy.

Newer Devices:

There have been a number of newer devices introduced to destroy the endometrium and underlying myometrium. These newer devices shorten the long learning curve associated with electrocoagulation

surgery. The majority of these “global systems” involve the use of a device which covers the whole endometrial surface simultaneously. The device is then activated and then using heat between 70 – 90 degrees C, the endometrium is destroyed.

The most recent ablation device is the microwave endometrial ablation system. This system requires surgical expertise for its safe use. The delivery system is in the form of a long probe, which is 8 mm in diameter, and can be used in any uterus up to 14 cm in length. Its place in patients with sub mucus fibroids is, at this time, uncertain. In randomised-controlled trials, it has been favourably compared to endometrial ablation. Because the procedure is totally blind, it is essential to be as positive as one can that neither a false passage or perforation has occurred before the commencement of the procedure. Hysteroscopy should be performed before and after the procedure. Training guidelines for MEA are as for endometrial ablation clauses 1 – 8.

There are several contraindications to the use of microwave endometrial ablation and these should be well known by the operator before attempting the procedure. The gynaecologist intending to undertake this procedure should observe an experienced operator for 5 cases. Five more cases should then be performed under direct supervision before performing the surgery solo.

References

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- 6 Sharp N, Cronin N, Feldberg I, et al, Microwaves for menorrhagia: A new fast techniqe for endometrial ablation. Lancet 346 : 898; 1003-1004 1995

Links to other related College statements

- [C-Trg 1](#) Guidelines for training in advanced endoscopic surgery
- [C-Trg 2](#) Guidelines for training in advanced operative laparoscopy
- [C-Trg 4](#) The use of lasers by Fellows of the RANZCOG

Patient Resources

None provided

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