Background

The surgical management of menstrual bleeding disorders due to non-malignant causes has been advanced with the development of hysteroscopic endometrial ablation (HEA) as an alternative to hysterectomy. The procedure has been evaluated by the Royal Australian College of Obstetricians and Gynaecologists (RACOG) in association with the Australian Gynaecological Endoscopy Society. As a result of that evaluation, recommendations for a set of guidelines to be followed have been approved by the RACOG. The application of those guidelines to the introduction of HEA in WA Public Non-Teaching Hospitals is an essential prerequisite.

The provisions of this Operational Instruction represent an amendment to the guidelines for the granting of clinical privileges as set out in the Agreement between the Minister for Health and the AMA on the Provision of Visiting Medical Services at Public Non-Teaching Hospitals. This amendment has been formally approved by the Hon Minister and the AMA following consultation with the appropriate Colleges.

The following general comments of the RACOG regarding HEA are pertinent:

- Although this is classified as minimally invasive surgery, it must be recognised that this is not minor surgery.
- The operation requires surgical skills which initially need to be developed and practised under supervision.
- A considerable number of very serious complications have been recorded in several countries, mainly by relatively inexperienced hysteroscopists.
- Gynaecologists should not perform this procedure unless they have undertaken the training outlined in the guidelines (see below).
- Gynaecologists must be formally accredited to perform this procedure by the appropriate Area/Regional Clinical Appointments Committee.
- HEA is not considered to fall within the broad category of general gynaecology privileges – it is a special skill which requires specific endorsement by the appropriate Clinical Appointments Committee.
Should any gynaecologists currently performing this procedure not conform with the guidelines, they should be strongly encouraged to undertake further supervised training as soon as possible.

The procedure should only be performed in hospitals with the equipment described and with the assistance of appropriately skilled theatre and anaesthetic staff.

All gynaecologists performing HEA procedures are required to submit details of each procedure and its outcome for individual patients to the RACOG 2 year survey.

**GUIDELINES FOR ENDOMETRIAL ABLATION**

Training Requirements

1. Only specialist gynaecologists will be considered for eligibility to perform endometrial ablation.

2. Gynaecologists who are training in endometrial ablation must have a nominated supervisor who is well recognised as having adequate experience and skill in this field—this means a gynaecologist who has already met all the training requirements and has been accredited to perform the procedure at one or more hospitals.

3. Good diagnostic hysteroscopy skills (preferably more than 100 procedures).

4. Have attended an RACOG approved hysteroscopic surgery workshop, preferably with some hands-on experience; those gynaecologists planning to use laser must have participated in a workshop involving extensive hands-on experience.

5. Further practical experience under supervision. Only simple cases should be tackled first (for example, anteverted parous uterus under 8.5 cms in length).

6. The initial learning curve probably depends both on the technique used and the natural ability and caution of the surgeon. At least 5 cases should be observed (may include workshop cases) before starting. The following should be the minimum experience required in the supervised training phase:

   - laser - longest learning curve 20 cases
   - resection - medium 10 cases
   - roller ball - shortest 5 cases

   The full learning curve is much longer than this and some surgeons never develop the co-ordination to carry out difficult cases well.

7. Difficult cases should only be attempted when the surgeon is well advanced in the learning phase. These cases include:

   - the markedly retroverted uterus; the large uterus (>10 cms length); presence of submucous or intrauterine myomata; the nulliparous uterus and the congenitally abnormal uterus.
8. The training of nursing and other members of the operating theatre team is essential. Hospitals should arrange for theatre staff to acquire the necessary skills, where appropriate by temporary detachment to another hospital.

9. Training supervisors must have completed at least 50 cases which include technically difficult cases and uterine abnormalities.

10. At the completion of the training program, the supervisor should provide to the trainee a written document acknowledging the attainment of a satisfactory level of skill and knowledge by the trainee. This document should be provided to the relevant Appointments Committee when considering the issue of recommending hysteroscopic endometrial ablation privileges.

Equipment requirements

1. Hystero-resectoscope with laser fibres, resectoscope loops or roller balls.
2. Nd:YAG laser: or 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 from 2L glycine (1.5%) bags through a urological giving set is satisfactory, although a controlled inflow/outflow system may be preferred).
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.
7. It follows from the above that HEA should only be performed in hospitals which are equipped to perform major gynaecological surgery.

Indications for endometrial ablation

Generally, endometrial ablation is indicated for dysfunctional uterine bleeding where there is no detectable extrauterine pathology in women with an average sized uterine cavity and anteverted uterus.

There are a number of relative or absolute contraindications to performing endometrial ablation. These include: large uterus (>10 cms), markedly retroverted uterus, nulliparous or congenitally abnormal uterus, submucous or intrauterine myomata, moderate or severe adenomyosis, endometriosis, post-menopausal uterus, and possible endometrial malignancy.
Hysteroscopists and the hysteroscopy team should be aware of possible serious complications of endometrial ablation:

a) fluid overload
b) uterine perforation
c) haemorrhage
d) damage to other organs - bowel, ureter, common iliac vessels
e) post-operative infection
f) embolism
g) deaths have occurred

Submucous and intrauterine myomata

These should not be tackled 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. Submucous myomas should not be resected unless more than 50% of the myoma is visible within the cavity. Initial myoma resections should be carried out under supervision, and should preferably be on myomas of less than 3 cm diameter. Surgery should not be attempted on myomas of greater than 5 cm.

Preoperative Counselling

Counselling should be adequate and realistic. An information sheet should be given to the patient preoperatively (the College of Obstetricians recommended information sheet is attached to this policy). True informed consent should be obtained by the surgeon performing the procedure and should not be delegated.

Follow up

It is generally recommended that patients should be followed up at about 6 weeks, and again at between 4 and 6 months. Longer term follow up is advisable to assess final outcomes for an individual surgeon.

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, should also be undertaken.

Pregnancy post-endometrial ablation

Although thorough endometrial ablation appears to be a reasonably effective method of sterilisation, a small number of pregnancies have occurred.
Therefore, a concurrent tubal sterilisation may be indicated with endometrial ablation as there may be an increased incidence of miscarriage, ectopic pregnancy, intrauterine growth retardation and placenta accreta in any subsequent pregnancies. It should be noted that few actual case reports have been written up of these problems, but according to authorities on the matter, could be expected.

References

Attachment
General information for patients.

Peter J Brennan
COMMISSIONER OF HEALTH
HYSTEROSCOPIC ENDOMETRIAL ABLATION

GENERAL INFORMATION FOR PATIENTS

What is it and who is it suitable for?
- It involves removal of the uterine lining by resection with an electro-diathermy cutting loop or by ablation with a mini "roller-ball" using electro coagulation.
- In some centres, laser may be used.
- It is suitable for women with menstrual bleeding disturbances due to certain benign causes.
- It can be an alternative to hysterectomy in some situations.
- Although it appears to be a reasonably effective type of sterilisation and cannot be used on women who wish to retain their fertility, a small number of pregnancies have been reported elsewhere in the world following these procedures. Contraception such as tubal ligation should be considered.

What does the technique involve?
- It involves a general anaesthetic and lasts 30-60 minutes.
- It is carried out through a small telescope inserted through the uterine cervix via the vagina.
- Sometimes a laparoscopy needs to be carried out at the same time.
- It only requires a day or overnight stay in hospital.
- Most patients require pre-treatment with hormones to thin the uterine lining. The hormones which we usually use are danazol or one of the new gonadotrophin-releasing hormone analogues.
- Some surgeons recommend continuation of these hormones for 1-2 months following the ablation, but this is not widely practised.

Advantages
- Short stay and short convalescence compared with hysterectomy.
- The muscular wall and the neck of the womb are left intact  [Regular Pap smears are still needed afterwards].
- Provides effective permanent contraception for most women, with a very small failure rate (about the same as tubal sterilisation).
- 50% of women stop menstruating completely; 40-50% will have light or very light periods.
Disadvantages

- This is a recent innovation and few long-term studies have yet been published. Overseas data are very encouraging in that no long-term problems have been identified and heavy periods rarely recur later.

- Approximately 5% of patients will still have moderate or heavy bleeding after the operation and some of these will get a good response with a repeat operation. Occasionally, a hysterectomy will need to be carried out to permanently cure the bleeding problem.

- Serious risks are uncommon or rare. Complications which have been occasionally reported with these procedures include excessive fluid absorption; heavy intra-operative or post-operative bleeding; post-operative infection; perforation of the uterus during a difficult procedure; anaesthetic problems. Most of these problems can be anticipated and minimised or effectively treated. Rarely, a hysterectomy may have to be performed because of a complication such as bleeding during an ablation procedure.

Other Aspects

- The operation is almost always carried out with the surgeon looking at a television monitor and using a small medical video camera. Sometimes a record of part of the procedure may be taped for local training purposes.

- The immediate post-operative bleeding pattern is very variable. The bleeding and menstrual discharge following operation usually settles within 1-4 weeks. Some patients will get no further bleeding, but many will have a moderate bleed around one month later. In most cases, this becomes very light in future periods.

- Sexual intercourse should be deferred for 2 weeks or until the bleeding settles. There is no evidence that the operation has any effect on the quality of sexual enjoyment.

- In the long-term, the cavity inside the womb shrinks to a fairly small size. The cavity becomes lined with a thin layer of scar tissue.

- There is no evidence that this procedure causes cancer or other serious medical problems in the long-term.