

Endometrial Polyps

Introduction

Endometrial polyps are a localised overgrowth of glands and connective tissue around a vascular core, or a small blood vessel. Single or multiple polyps may occur ranging from a few millimeters to many centimetres in size. They may lie flat against the surrounding endometrium or be very long and protuberant.

What causes polyps?

Endometrial polyps are common. Many cause no symptoms. Their prevalence is between 7.8 and 35% depending on the type of patient studied. **Risk factors** for the development of polyps include *advancing age, high blood pressure, obesity and use of tamoxifen* (a medication used after treatment of breast cancer). The incidence is greatest in women between 40 and 50 years of age. The prevalence appears to increase with age during the reproductive years, and also appears to be higher in infertile women. This suggests a causative relationship. Women using tamoxifen have a 30-60% risk of developing polyps. It is uncertain whether *hormone replacement therapy* increases the incidence of polyps. Use of progesterone-only contraception such as Implanon, Mirena or Depo Provera as well as use of the combined oral contraceptive pill may reduce the risk of polyps.

Both an abnormal overgrowth of endometrial cells and endometrial cancer may originate in endometrial polyps. **Malignancy** may occur in up to 13% of endometrial polyps. The risk of malignancy increases with age but the risk in premenopausal women appears to be low. *Risk factors for endometrial cancer* within a polyp include abnormal bleeding and increasing polyp size. Other general risk factors for endometrial cancer such as *obesity, diabetes and hypertension and long standing irregular periods* also increase the risk as does use of tamoxifen.

What are the symptoms of an endometrial polyp?

- Bleeding between cycles
- Heavy periods
- Fertility problems
- Problems associated with polyp-to-cancer progression
- Large polyps may protrude through the cervix causing bleeding after intercourse

Diagnosis of Endometrial Polyps

The best test, against which others are compared, for diagnosing endometrial polyps is **hysteroscopy and curettage under general anaesthetic**. This enables direct visualization of the polyp. Most patients come to my office having had bleeding problems and a trans-vaginal ultrasound (TVUS). TVUS has up to 96% chance of detecting endometrial polyps compared to hysteroscopy and curettage. The addition of colour flow or power Doppler to the ultrasound examination may improve the chances of detecting a polyp. **Saline-infused sonography (SIS)** can also increase the chances of detecting a polyp and is probably the best way of doing this using ultrasound.

Hysterosalpinography (HSG- an x-ray performed after pushing dye through the cervix into the endometrial cavity) also has a high chance of detecting endometrial polyps but is more invasive and more painful than ultrasound. It also involves using ionizing radiation and frequently iodine containing contrast. Other imaging methods such as MRI are useful but expensive, and CT scanning has a limited role because of its low sensitivity.

Can ultrasounds tell malignant from non-malignant polyps?

Unfortunately ultrasound is unable to distinguish malignant from non-malignant polyps, so we can't use this as a means of deciding who needs a curette and who does not.

Management of endometrial polyps- what do we do?

Around 25% of endometrial polyps spontaneously disappear over the course of one year. Smaller polyps are most likely to regress (<10mm) especially if they don't have a central feeding blood vessel. Small polyps are found incidentally in post-menopausal women unlikely to be malignant (insert reference) and observation may be an option after appropriate discussion.

Medical management of endometrial polyps:

Medical management (taking tablets) has a very limited role in treating endometrial polyps. Some kinds of hormonal therapies may have a preventative role for polyp formation, such as use of the levonorgestrel releasing intrauterine device (Mirena), however its specific use for the treatment or prevention of polyps is the subject of research.

Surgical management:

Investigation and removal of polyps is generally carried out under general anaesthetic. A blind dilatation and curettage (that is, performing a curette without first looking into the uterus with a hysteroscope) has been reported to remove endometrial polyps in only 8% of cases whereas the addition of polyp forceps (similar to long tweezers) may increase complete removal to around 41%. **The recommended way of removal is hysteroscopic resection.** Hysteroscopic polypectomy is effective and safe and reduces the recurrence rate compared with removal by polyp forceps.

Effects of surgical treatment

The removal of endometrial polyps *usually does not result in a decrease in menstrual flow* although bleeding between periods may be greatly improved. Intrauterine adhesions (Asherman's syndrome) are rare after polypectomy because the myometrium (muscle of the uterus) is not included in the curette or resection. Occasionally when hysteroscopic removal of a polyp cannot be carried out, hysterectomy may be recommended in symptomatic women who have risk factors in malignancy. However this is rare. Polypectomy in infertile women is very effective in improving fertility with fertility rates improving to 40-80% over the ensuing 12 month, i.e.: almost as good as the baseline pregnancy rate over 12 months of 84%. Spontaneous pregnancy rates as well as IVF pregnancy rates are increased.

Summary

- Polyps are localized overgrowths of the endometrium and may be either benign or malignant (cancer)
- Medical management of polyps is not recommended
- Hysteroscopic resection of polyps remains the best treatment
- Removing polyps may not decrease menstrual flow but usually improves bleeding between periods
- Removing endometrial polyps in the context of infertility will greatly improve pregnancy rates

Please read these notes in conjunction with procedure information sheet "Operative Hysteroscopy".