

Newer therapies in treatment of AUB



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**Levonorgestrel
Intrauterine
Device**

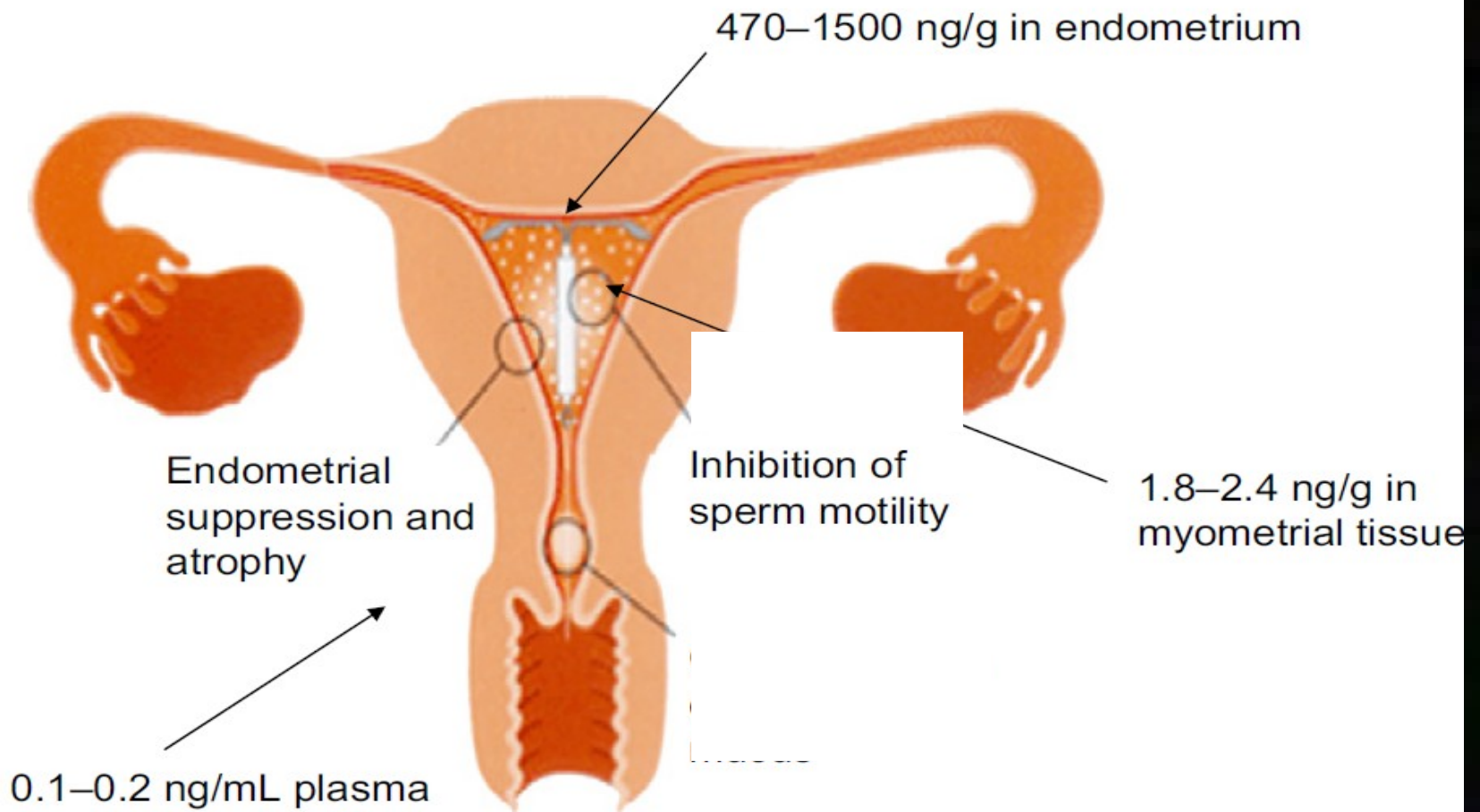
**Hysteroscopic
Polypectomy/
Myomectomy/
Resection of
Endometrium**

**Conservative therapies for AUB
if medical treatment fails**

**Endometrial
Ablation
techniques**

**Fibroid
embolisation
Ultrasound
treatment of
Fibroids**

Levonorgestrel IUD



Menorrhagia: Indications for LNG-IUS

**Normal sized
uterus**

Fibroids
(Higher expulsion
rates)

Adenomyosis

**Dysmenorrhoea due to
Endometriosis**

What to expect from LNG IUS?

Good relief for dysmenorrhoea.

Spotting for first 6-8 months

Initial prolonged periods will respond to tranexamic acid

Cannot be used after Rheumatic heart disease due to danger of endocarditis

Cannot be used after acute liver failure

Cannot be used after TCRE; Formation of synechiae will make it difficult to remove.

Hysteroscopy or hysterosonography can be suggested as a second-line procedure when ultrasound suggests an intrauterine abnormality or if medical treatment fails after 3–6 months .

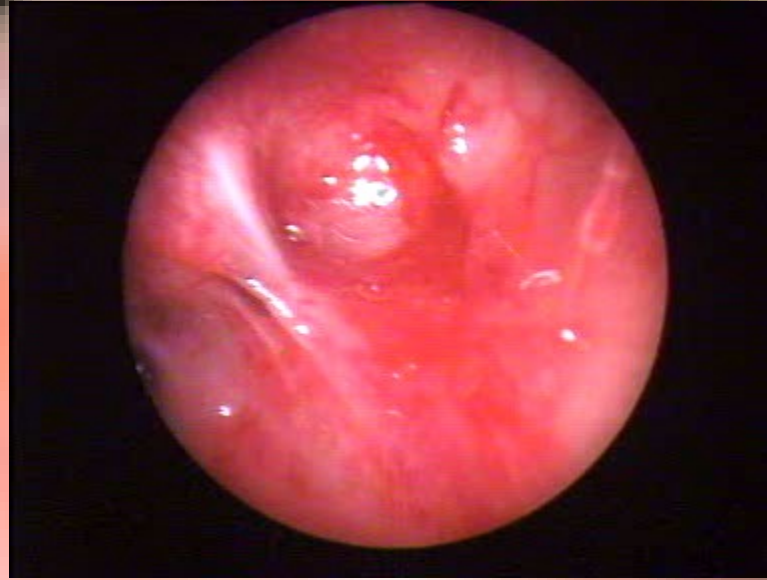
**48 year old woman with
menorrhagia**

**D&C showed secretory endometrium
6 months back**

Patient continues to bleed every day lightly

**USG shows thick endometrium
of 1.5 cm**

**Various regimens of progesterone and
estrogen have failed**



Hysteroscopic picture of intra uterine adhesions in this patient

Because of adhesions, patient gave an atypical picture of bleeding every day in small amounts which is usually typical of estrogen withdrawal bleeding.

After cutting the adhesions, lot of tiny polyps could be seen. TCRE was done.

Patient went into natural menopause 1 year later and came for hot flashes 3 years later.

40 year old woman had menorrhagia in 2014

USG thick endometrium:

Could not tolerate hormones.

2 years later, in january 2016, she had heavy menstruation and was diagnosed to have 10mm endometrial polyp. Uterus 8.4cm.

She had pelvic infection and was given antibiotics. she also had intractable vomiting and was told that hormones caused vomiting.

In June 2016 she has bleeding that lasts 16-20 days comes every 30 days

**Hysteroscopic removal of multiple polyps cured her for 1 year.
She was adviced to put in LNG-IUS or take medical treatment,
which she did not take.**

2 years later, she underwent hysterectomy.

29 year old woman who delivered 5 months back comes with heavy bleeding.

PV: uterus bulky fornices free. No pelvic infection

USG: Bulky uterus with 10mm endometrium. Bilateral PCOD.

Serum HCG ; Negligible values.

Norethisterone 5mg 2-2-2

Plus

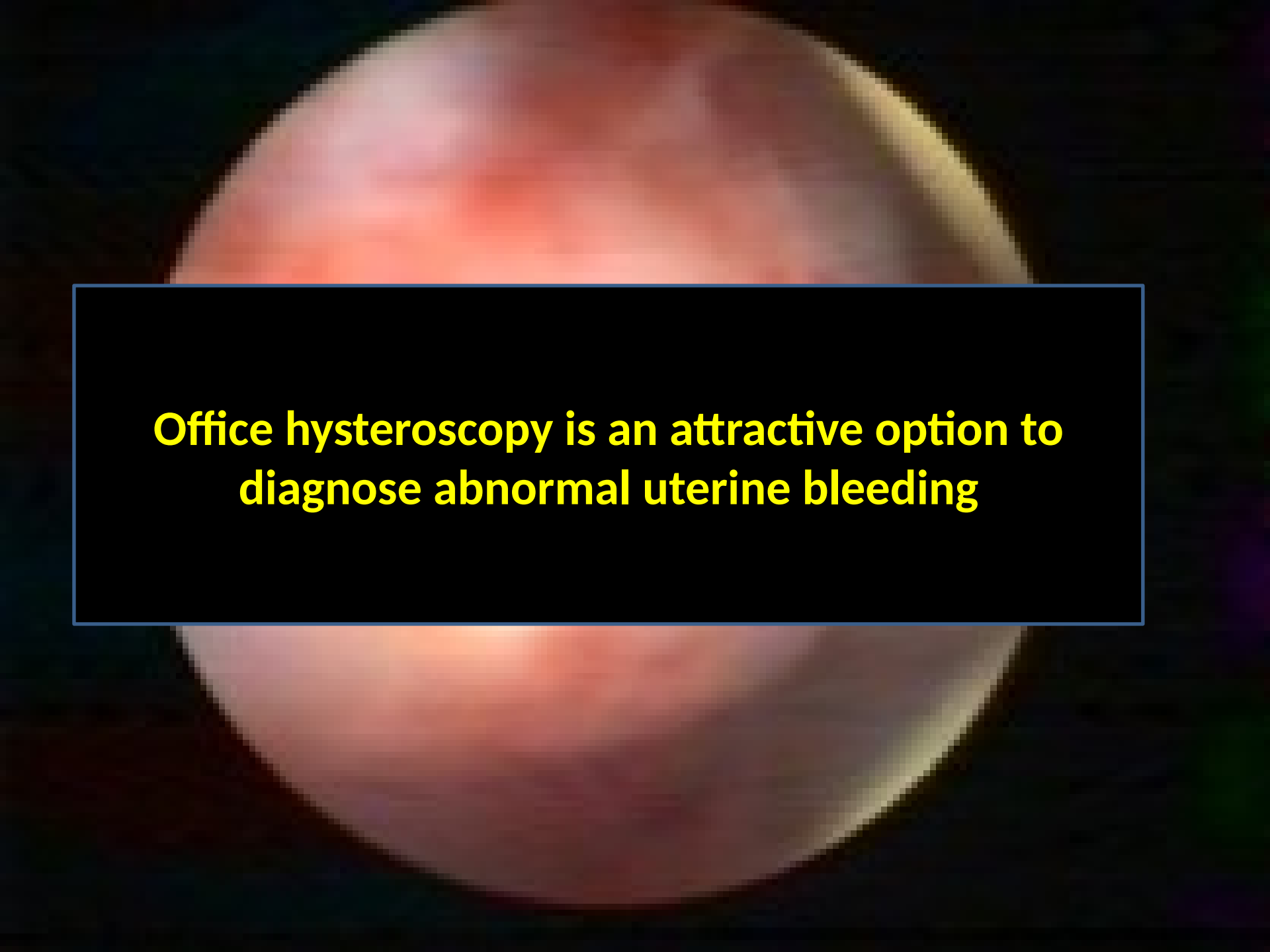
Tranexamic acid 500mg 2-2-2-2-

Plus

Venusmin 900mg daily -

No relief in 2 days

Hysteroscopic removal of placental bits was done. She continued to bleed. She was then treated with desmopressin nasal spray and she remains asymptomatic for 2 years now.

The background of the slide is a blurred, circular hysteroscopic view of the uterine cavity. The image shows the pinkish-red mucosal lining of the uterus, with some darker areas that could be polyps or other abnormalities. The lighting is somewhat dim, and the overall appearance is out of focus.

**Office hysteroscopy is an attractive option to
diagnose abnormal uterine bleeding**

Classification of fibroids

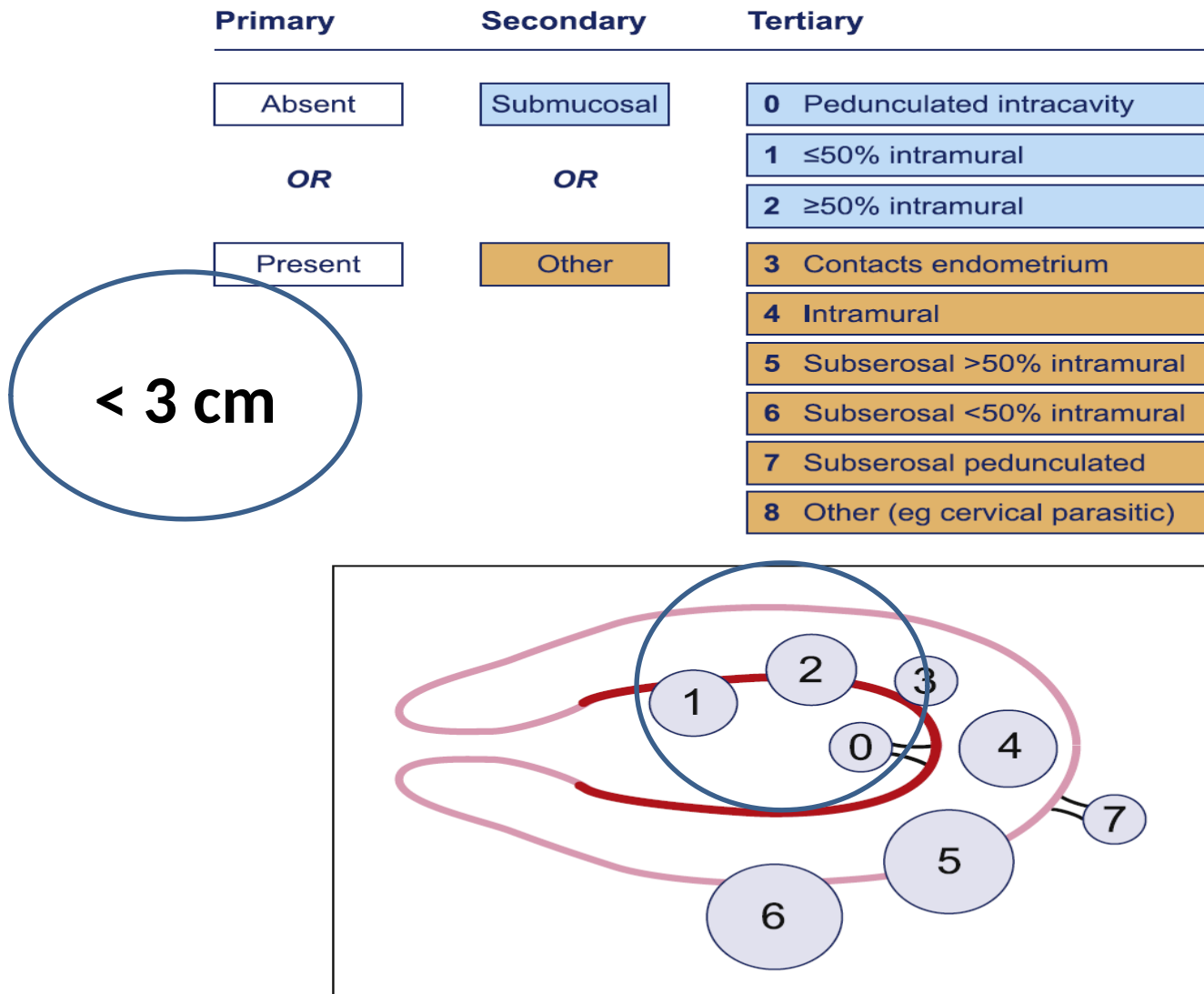


Fig. 2. Tertiary classification of AUB-L (adapted from Munro et al. [13]).

Hysteroscopic myomectomy with unipolar cautery, bipolar cautery, contact lasers, morcellators, etc are newer modes of therapy for submucous fibroids.



Endometrial Ablation

Indications for thermal ablation

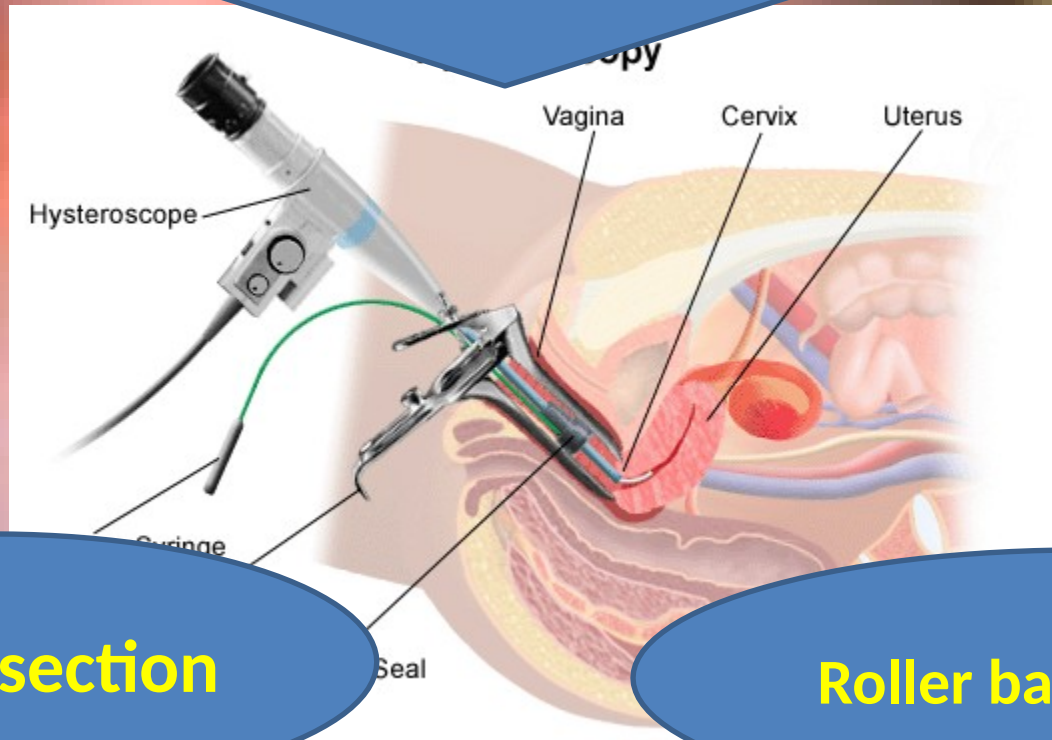
Failed Medical treatment

Rule out malignancy, polyps, Adenomyosis.

Woman has completed her family

Destroy the basal layer of Endometrium

First Generation Endometrial Ablation



Loop resection

Roller ball resection

Laser Ablation



Second Generation Endometrial Ablation

Free fluid thermal ablation



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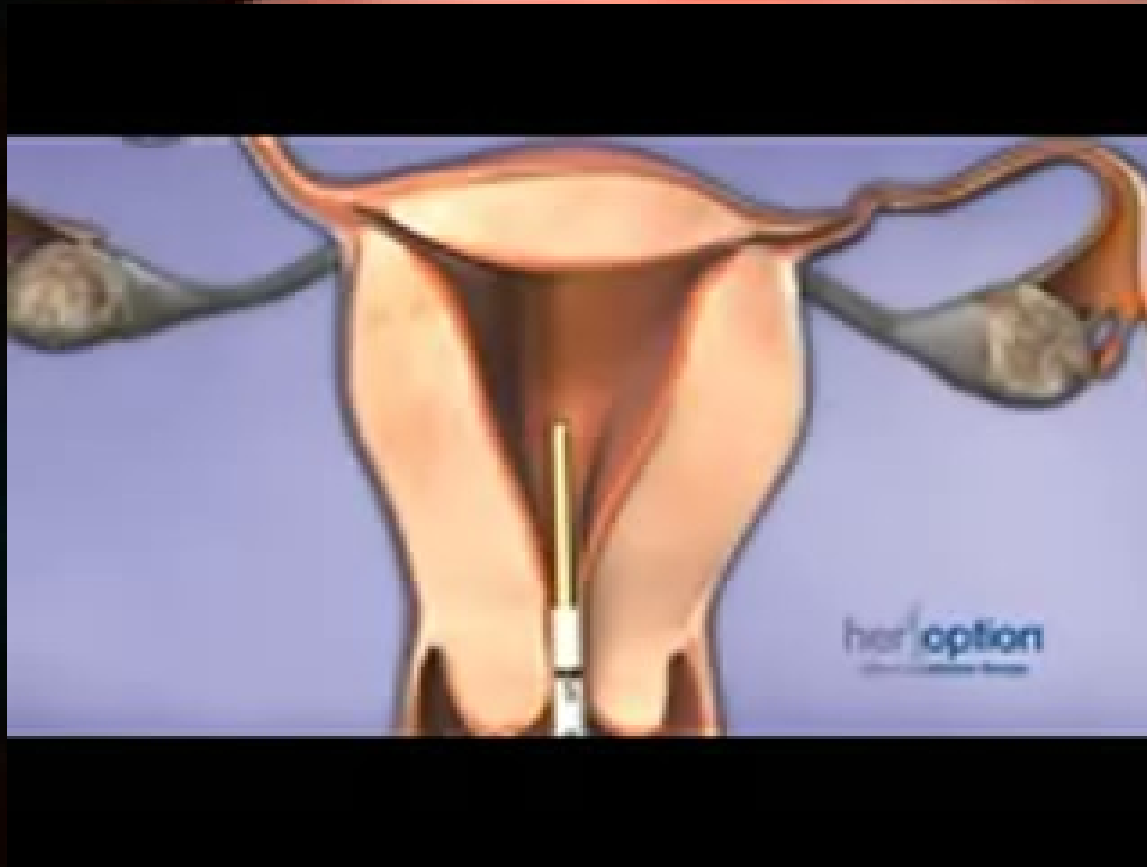


With Hysteroscopic visualisation

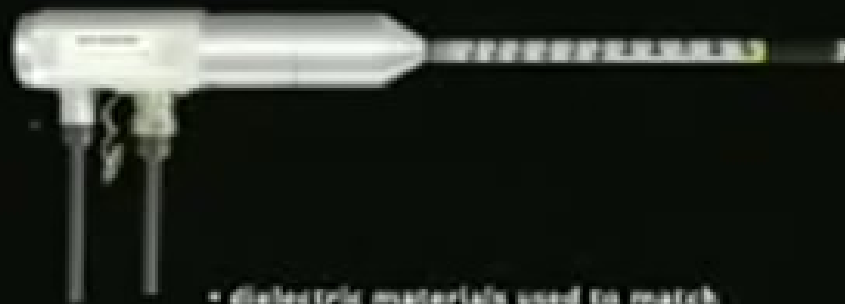
ELITT: Endometrial laser intrauterine thermo-therapy



Cryoablation: HerOption



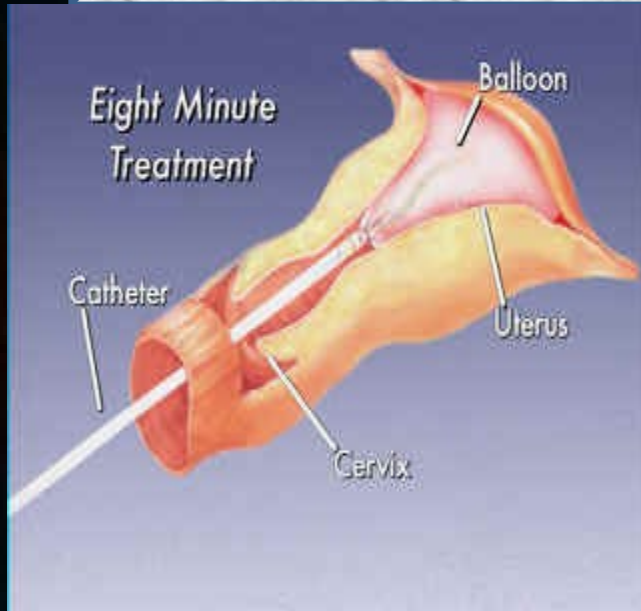
Microwave endometrial ablation



• dielectric materials used to match tissue for efficient energy transfer

A microwave generator supplies microwave energy to a hand held reusable applicator. Treatment is completed by 'painting' the inside of the cavity from side to side with the probe, whilst withdrawing the device. The treatment temperature is maintained between 70 and 80 8C observed on a computer screen. The procedure may be performed under local or general anaesthetic

Thermal balloon endometrial ablation



Thermachoice
8 minutes

Cavaterm
15 minutes
Diff balloon sizes

**Thermal balloon endometrial ablation using
foley's catheter.**



**Inflate the catheter outside
The body**



Cut off the tip



**Deflate the bulb
And insert into the uterus**



**Inflate the bulb with 30 cc
Boiling water.
Keep for 5 min**

Deflate

**Re-inflate with fresh
boiling water
and keep for 5 min**

Repeat for 6 times



Side effects

Crampy abdominal pain for a few hours after procedure

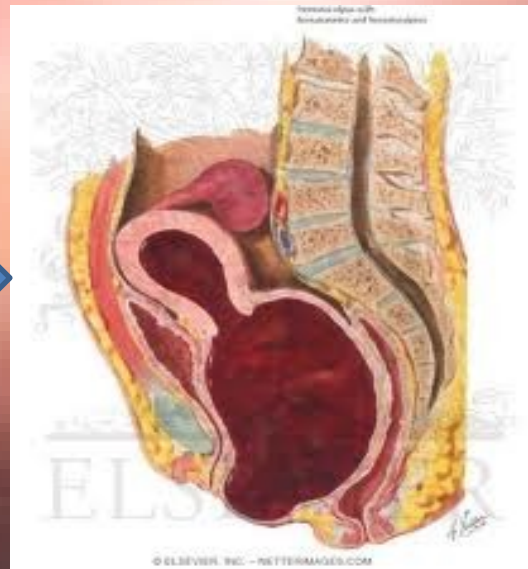
Watery discharge for 1 month

Non stop bleeding



**Inflated foley in
uteus with cold
water for a few
hours**

**Uterine cramps with
amenorrhoea**



Dilate cervix.

The image features a central vertical stack of four ovals, each containing text. The background is a glowing sphere with a color gradient from red at the top to blue at the bottom. The ovals are filled with a dark, textured pattern and have a blue border. The text is in a bright yellow font.

Amenorrhoea

Hypomenorrhoea

Normal Periods

**Menorrhagia :
treatable**

Predictors of treatment failure

Age less than 45.

H/O Dysmenorrhoea

H/O Tubal ligation.

Prediction of treatment outcomes after global endometrial ablation.

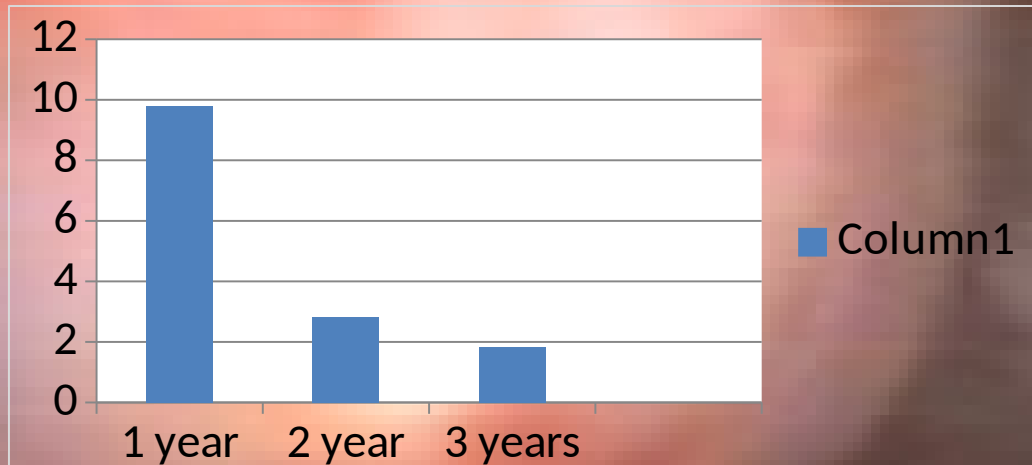
El-Nashar SA - *Obstet Gynecol* - 01-JAN-2009; 113(1): 97-106

Uterine Artery Embolisation

Polyvinyl alcohol particles are passed through a fluoroscopically guided transarterial catheter inserted in the common femoral artery to selectively occlude the arteries supplying the myoma.



Large symptomatic myomas in women who do not wish or are poor candidates for major surgery



Percentage of women who needed surgery

Absolute contraindications

Active genitourinary infection,
Genital tract malignancy,
Reduced immune status,
Severe vascular disease limiting access to the uterine
arteries, Contrast allergy, or impaired renal function.

Relative contraindications

Submucous myomas, Pedunculated myomas,
Recent GnRH-a treatment
Previous iliac or uterine artery occlusion,
Postmenopausal status

Magnetic resonance-guided focused ultrasound surgery (MRgFUS)



The rise in temperature of the tissue receiving the high intensity focused ultrasound (HIFU) and the resultant protein denaturation and irreversible cell damage form.

A reduction of up to 98% in myoma volume and symptoms has been reported .

A grayscale ultrasound image showing a large, well-defined, hypoechoic mass, likely a fibroid, in the uterus. The mass is roughly oval-shaped and occupies a significant portion of the uterine cavity. The surrounding uterine wall and other structures are visible in a lighter gray tone.

Rule out concomitant Adenomyosis

**There should be no bowel between the
abdominal wall and fibroid**

Levonorgestrel IUD is a promising option for AUB without pelvic infection. Treats dysmenorrhoea also. Spotting is a problem for 6 months

Endometrial ablation is a one time procedure, and no spotting. Patients with dysmenorrhoea or fibroids may not benefit

Hysteroscopy is worth learning and a useful procedure for intractable bleeding, diagnosed polyps and type 0 ,1 and 2 fibroids, preferably <3 cm

Uterine artery embolisation and MRI guided ultrasound treatment of fibroids in selected patients with fibroids



**Thank
you.....**