Dr Nancy Peters

Uterine Fibroids

Uterine fibroids (leiomyomas) are benign tumours arising from myometrial smooth muscle cells and fibroblasts. Fibroids have a reported prevalence of 25% based on imaging and up to 80% on pathological examination of hysterectomy specimens. Incidence increases with age along with variation based on ethnicity.

Clinical Presentation

- Abnormal uterine bleeding – heavy / prolonged menstrual bleeding
- Bulk related symptoms
  - Pelvic pressure or pain
  - Urinary symptoms – frequency, difficulty emptying the bladder
  - Bowel symptoms – constipation due to pressure on the rectum
  - Venous compression
- Pain
  - Dysmenorrhoea
  - Fibroid degeneration/torsion
- Infertility/miscarriage
  - Fibroids that distort the uterine cavity
- Adverse pregnancy outcomes
  - Malpresentation, preterm labour and birth, abruption

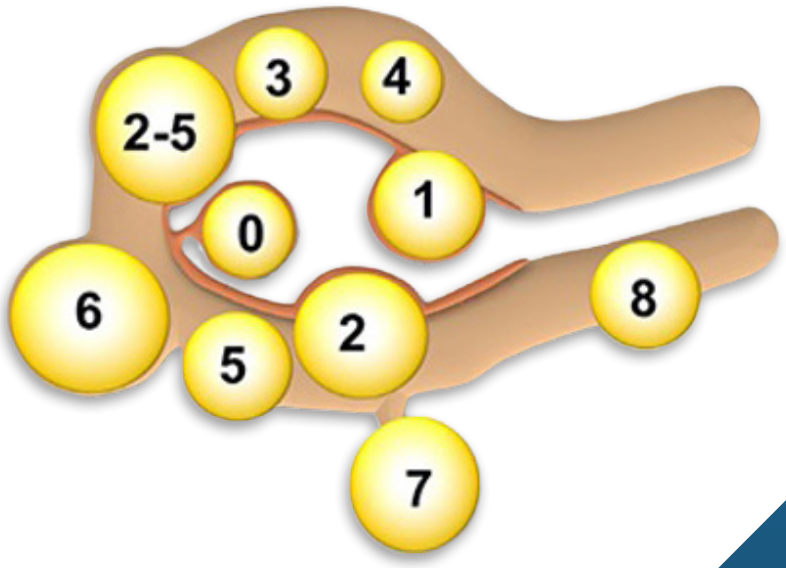
Fibroid Classification

The International Federation of Gynecology and Obstetrics (FIGO) classification system is used to describe fibroids based on location. The location of fibroids is critical to determining surgical management options.

FIGO leiomyoma subclassification system

SM - submucous	0	Pedunculated intracavitary
	1	<50% intramural
	2	>50% intramural
	3	Contacts endometrium; 100% intramural
0 - Other	4	Intramural
	5	Subserous >50% intramural
	6	Subserous <50% intramural
	7	Subserous pedunculated
	8	Other {specify eg, cervical, parasitic)

Hybrid (contact both the endomebium and the serosal layer)	Two numbers are listed separated by a hyphen. By convention, the first refers to the relationship with the endometrium while the second refers to the relationship to the serosa. One example is below.	
	2-5	Submucous and subserous, each with less than half the diameter in the endometrial and peritoneal cavities, respectively.



Risk Of Leiomyosarcoma

Although leiomyosarcoma is rare (0.36-1.8 per 100000 women years), consideration should always be given to risk factors. These include demographic factors such as age, menopausal status, ethnicity, tamoxifen use, a history of pelvic irradiation, HLRCC or childhood retinoblastoma.

Clinical concerns are unusual bleeding or a rapidly expanding mass while imaging features include large interval growth with ill-defined margins, along with ascites and evidence of secondary spread.

Irrespective of risk factors, specimen retrieval at time of surgical management should always be performed in a contained fashion. This minimises risks of disseminated tissue including parasitic growth of benign fibroids or worsened prognosis in the case of malignant disease.

Management

Following assessment of risk factors for leiomyosarcoma, management should be individualised based on patient experience/preferences and desire for fertility. Iron supplementation and haemoglobin optimisation are also imperative.

Medical management options include:

- Non-hormonal options
  - Tranexamic acid each cycle
  - NSAIDS
- Hormonal options
  - Combined oral contraceptive pill
  - Progesterone only pill
  - Long acting reversible contraception
  - GnRH antagonists with addback therapy

Uterine artery embolisation (performed by an interventional radiologist) is an option when not desiring future pregnancy.

Surgical management

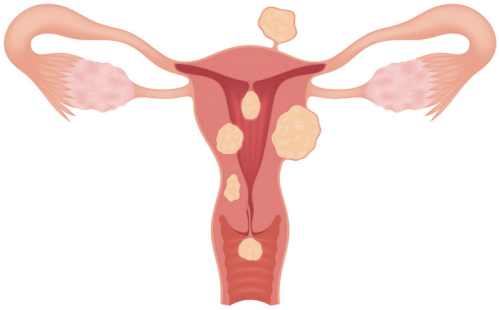
- Hysteroscopic
  - FIGO types 0-2 i.e. submucosal fibroids
- Myomectomy
  - Wherever possible this should be performed using a minimally invasive approach (laparoscopically / robotically) with contained morcellation
  - Used when desiring fertility or in patients wanting to conserve their uterus
- Hysterectomy

New Developments

In 2022 Ryeqo (relugolix, norethisterone acetate, estradiol) was approved by the TGA for treatment of moderate to severe symptoms of uterine fibroids in adult women of reproductive age (of note it has also been approved for symptomatic treatment of endometriosis in January 2024).

Relugolix is an oral GnRH receptor antagonist ultimately inhibiting ovulation and reducing estrogen and progesterone production. The combination with estradiol and norethisterone minimises the potential menopausal symptoms associated with the hypoestrogenic state and protects the endometrium.

Although TGA approved, it is not yet PBS listed and as such cost may be a limiting factor.



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MR0047489 StGeoPH Snapshot - Uterine Fibroids – Dr Nancy Peters