

Uterine Fibroids

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Overview

Uterine Leiomyomas, commonly known as fibroids, are well-circumscribed, non-cancerous tumours arising from the myometrium (smooth muscle body) of the uterus. In addition to smooth muscle, leiomyomas are also composed of extracellular matrix containing collagen, fibronectin and proteoglycan. Other names for these tumours include fibromyomas, fibromas, myofibromas, and myomas. Leiomyomas are the most common solid pelvic tumour in women, causing symptoms in approximately 25% of reproductive age women. However, with careful pathologic inspection of the uterus, the overall prevalence of leiomyomas increases to over 70%, because leiomyomas can be present but not symptomatic in many women. Leiomyomas are usually detected in women in their 30's and 40's and will shrink after menopause in the absence of post-menopausal oestrogen replacement therapy. Risk for developing leiomyomas is also higher in women who are heavy for their height and is lower in women who are smokers and in women who have given birth.

Leiomyomas are classified by their location in the uterus. Subserosal leiomyomas are located just under the uterine outer serosa layer called the perimetrium and may be pedunculated (attached to the corpus by a narrow stalk) or sessile (broad-based). Intramural leiomyomas are found predominantly within the thick myometrium muscle but may distort the uterine cavity or cause an irregular external uterine contour. Submucous leiomyomas are located just under the inner uterine mucosa (endometrium) and, like subserosal leiomyomas, may be either pedunculated or sessile. Tumours in subserosal and intramural locations comprise the majority (95%) of all leiomyomas; submucous leiomyomas make up the remaining 5%. Most leiomyomas span more than one anatomic location and, therefore, are hybrids (e.g., a predominantly intramural leiomyoma with a submucous component). Transformation of uterine leiomyomas (benign) to uterine leiomyosarcomas (malignant smooth muscle tumours of the uterus) is extremely rare. However, without pathologic examination of the myoma tissue, this determination is not possible. Uterine leiomyosarcomas are found in approximately 0.1% of women with leiomyomas and are more frequently associated with large or rapidly growing fibroids.

Causes

Despite the major public health impact of leiomyomas, little is known about their cause. There is abundant evidence that oestrogen promotes fibroid growth including the clinical observations that fibroids grow in the presence of high levels of oestrogen, such as during the reproductive years, and that they regress in the presence of low levels of oestrogen, such as following menopause or during gonadotropin releasing hormone (GnRH) agonist therapy.

Furthermore, fibroids have higher oestrogen concentrations, bind more oestrogen, have more oestrogen receptors. Recent research studies had also proven that fibroids are sensitive to progesterone in addition to oestrogen. For example, fibroid size increases during treatment with synthetic progesterone. Combination GnRH agonist and progesterone therapy has been shown to have no effect on uterine volume, in contrast to GnRH agonist therapy alone which has been shown to reduce uterine volume. Biochemically, fibroids have higher progesterone receptor concentrations than normal myometrium. Together, these findings suggest that progesterone also enhances fibroid growth. Other hormones such as growth hormone (GH) and prolactin (PRL) are also thought to promote fibroid growth, but their role is even less well defined. Overall, oestrogen, progesterone, and growth factors likely promote tumour growth, but only after the initiation of tumour formation. This initiating event remains unknown, although recent evidence suggests there is a strong inherited component to fibroid development.

Signs and Symptoms

Research shows that between 20% and 50% of women have fibroid-related symptoms at some point in their life. The two most common symptoms of fibroids are abnormal uterine bleeding and pelvic pressure. The most common bleeding abnormality is prolonged and/or profuse uterine bleeding (menorrhagia). Normal menstrual periods typically last four to five days, whereas women with submucous fibroids often have periods lasting longer than seven days. Women with fibroids also can have such heavy bleeding that they need to change sanitary protection frequently (often, every hour). Pressure results from an increase in size of a multiple fibroid uterus or from a particularly large fibroid. It is not unusual for a uterus with leiomyomas to reach the size of a four to five-month pregnancy. In addition to vague feelings of pressure because a fibroid uterus is usually irregularly shaped (having many lumps and bumps), women can experience pressure on specific adjacent pelvic structures including the bowel and/or bladder resulting in difficulty with bowel movements and constipation or urinary frequency and incontinence. Leiomyomas are also associated with a range of reproductive dysfunction including recurrent miscarriage, infertility, premature labour, fetal malpresentations, and complications of labour.

Conventional Medicine Treatment

Surgery

In general, fibroids only need to be treated if they are causing symptoms. The primary treatment for patients with large or symptomatic fibroids is surgery. Hysterectomy (surgical removal of the entire uterus) is the most frequent operative technique used to treat this disorder. When women wish to preserve childbearing potential, a myomectomy may be performed. Unlike hysterectomy in which the entire uterus is removed, myomectomy is a surgical procedure in which individual fibroid(s) are removed. Unfortunately, there is a significant risk of recurrence of fibroids after myomectomy; in some studies, up to 10% of women who underwent an initial myomectomy required a second major operative procedure. In addition, a quarter to a half of women who underwent myomectomies had evidence by ultrasound of recurrence of their fibroids within one to ten years.

Pharmaceutical Medicine

Medicines can help control fibroid-related symptoms. The most effective medications for the treatment of fibroids are GnRHa's (including Lupron, Synarel, Zoladex). GnRH agonists induce a low-oestrogen and progesterone (menopause-like) state. Because fibroids are dependent on oestrogen and progesterone for their development and growth, induction of a low oestrogen state causes reduction of tumour and uterus mass, resolving pressure symptoms. In addition to decreasing the size of the uterus, treatment with GnRH agonists also stops menstrual flow (amenorrhoea). Unfortunately, cessation of GnRH agonist treatment is followed by a rapid regrowth of the fibroids and of the uterus to pre-treatment volume. Additionally, because bone also requires oestrogen, long term use of GnRH agonists can significantly decrease bone density and can lead to bone loss or osteoporosis. Other medical therapies including androgenic agents (e.g., danazol, gestrinone), progestins (e.g., medroxyprogesterone acetate, depomedroxyprogesterone acetate, norethindrone), and oral contraceptive pills have also been used to control menorrhagia in women with leiomyomas, presumably by diminishing the endometrium (endometrial atrophy). However, these medications do not consistently decrease uterus or fibroid volume and are often ineffective in controlling menorrhagia.

Natural Medicine Treatment

In TCM uterine myoma is regarded simply as a 'uterine masses' caused by stagnant blood and energy and by the obstruction of the uterus due to phlegm and heat. In the classics of Chinese medicine written over 2000 years ago these masses are called 'concretions & conglomerations, accumulations and gatherings'. The symptoms of menorrhagia, pain, abdominal distension and infertility are all encompassed in the root cause diagnosis. The treatment principle in TCM is to promote the flow of blood and energy, soften the uterine masses and break down the accumulation of phlegm. The treatment approach is to use herbal medicine formulas that include the blood invigorating and stasis breaking medicinals together with strong energy moving medicinals

Our Female Healthcare Philosophy

At the Women's Natural Health Clinic, we specialise in providing comprehensive natural reproductive, gynaecological, obstetric and general healthcare for females from adolescence to post-menopause. Our approach is to integrate techniques in both oriental and western medical diagnosis to formulate a naturally oriented treatment plan combining acupuncture, herbal medicine, naturopathic medicine, nutritional therapy, exercise and lifestyle. Each treatment plan is tailored specifically to each individual woman maximizing results.

Please email us at enquiries@naturalgynae.com with questions, we are more than happy to provide any information via email that will assist you in deciding which treatment approach would be best for you

For more information, contact details and appointments click here www.naturalgynae.com