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# Clinical presentation of fibroids

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Uterine fibroids, the most common tumours in women of reproductive age, are asymptomatic in at least 50% of afflicted women. However, in other women, they cause significant morbidity and affect quality of life. Clinically, they present with a variety of symptoms: menstrual disturbances including menorrhagia, dysmenorrhoea and intermenstrual bleeding; pelvic pain unrelated to menstruation; and pressure symptoms such as a sensation of bloatedness, increased urinary frequency and bowel disturbance. In addition, they may compromise reproductive function, possibly contributing to subfertility, early pregnancy loss and later pregnancy complications such as pain, preterm labour, malpresentations, increased need for caesarean section, and postpartum haemorrhage. Large fibroids may distend the abdomen, which may be aesthetically displeasing to many women. Abnormal bleeding occurs in 30% of symptomatic women, and abnormal bleeding, bloating and pelvic discomfort due to mass effect constitute the most common symptoms. The incidence of fibroids is highest in Black women, who tend to have multiple and larger fibroids, and more symptomatic fibroids at the time of diagnosis. The prevalence of clinically significant myomas peaks in the perimenopausal years and declines after the menopause. It is not known why some fibroids are symptomatic while others are quiescent. The size, number and location of fibroids undoubtedly determine their clinical behaviour, but research has yet to correlate these parameters with clinical presentation of the fibroids.

**Key words:** fibroids; myoma; leiomyomas; menorrhagia; dysmenorrhoea; intramural fibroid; subserosal fibroid; submucosal fibroid; pelvic pain; subfertility; miscarriage; pregnancy.

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Fibroids (myomas or leiomyomas) are essentially benign tumours which are rarely associated with mortality, but which cause significant morbidity and have an adverse effect on quality of life.[1] Due to their high prevalence, it might be anticipated that the incidence of leiomyoma-associated symptoms would be high, but in fact, the majority of fibroids (estimated to be in excess of 50%) are asymptomatic.[2–5] When women with fibroids present with symptoms, it is not always possible to be certain that it is the fibroids that are causing the symptoms. The symptoms that are associated with fibroids are very variable, but often begin as an insidious feeling of discomfort and may include pelvic pressure, congestion, bloating, heaviness, dyspareunia, urinary frequency, constipation, reproductive dysfunction and abnormal bleeding. Abnormal bleeding occurs in 30% of patients.[4] Abnormal uterine bleeding, abdominal bloating and pelvic discomfort due to mass effect are the most common symptoms.[6] Approximately 62% of women with symptomatic myomas present with multiple symptoms.[7] Black women tend to have more symptomatic tumours at the time of diagnosis, and usually present with multiple and larger fibroids.[8–10] The incidence and severity of symptoms associated with leiomyomas vary with size, number and location, as well as concomitant degenerative changes.[2,11,12] The prevalence of clinically significant myomas peaks in the perimenopausal years and declines following the menopause.[13] There is controversy about the impact of fibroids on reproductive function, especially with regard to whether they cause subfertility or miscarriage. In later pregnancy, they may enlarge and can be associated with various adverse outcomes such as abruption, intra-uterine growth restriction (IUGR) and increased need for operative delivery.[11]

## ABNORMAL VAGINAL BLEEDING

Excessive menstrual bleeding is often the sole symptom reported by women with leiomyomas.[6] The bleeding pattern most characteristic of myomas is menorrhagia, i.e. an increase in the amount of blood loss per month, and prolonged vaginal bleeding.[14] Neither of these patterns is diagnostic nor is one bleeding pattern more common, with many women experiencing both patterns. The bleeding can be sufficiently severe to cause iron-deficiency anaemia. It may lead to social isolation and loss of productive time because of the need to change sanitary towels frequently.[2,6] The quoted incidence of abnormal bleeding of 30% belies the fact that few data verify this, just as the exact mechanism by which fibroids cause abnormal bleeding is unknown. In a recent study that evaluated premenopausal women with and without abnormal vaginal bleeding, women with abnormal bleeding were significantly more likely to have either an intramural (58% vs 13%) or submucous leiomyoma (21% vs 1%) when compared with asymptomatic women.[15] Although this study did not directly assess the proportion of women with leiomyomas who had abnormal bleeding, it demonstrated that women who present with abnormal uterine bleeding are more likely to have a leiomyoma, and that women with either intramural or submucous leiomyomas could be asymptomatic. In other words, the mere presence of myomas does not necessarily lead to menorrhagia. Therefore, other possible aetiologies should be considered, including coagulopathies such as Von Willebrand's disease.[16]

When a population-based, non-care-seeking cohort of women was evaluated with abdominal and transvaginal sonography, myomas were detected in 73 women (21.4%). After adjustment of covariates, the presence of any myoma was not significantly related to the length of menstrual cycle ($P = 40$) or heaviness of flow [odds ratio (OR) 1.3, 95% confidence interval (CI) 0.7–2.5%]. Neither the number, volume or