Prolapsed Endometrioid Adenomyoma Associated with Post-Coital Bleeding

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Abstract

This case reports an atypical presentation of Uterine Adenomyosis. Adenomyosis is typically a diffuse, infiltrative disease of the endometrium and myometrium, which arises as a benign non-localized neoplasm of endometrial glands, stroma, and smooth muscle that almost always remains closely intimated to the uterine wall. Very rarely is it found to extend into the uterine cavity or, as in this case, develop into an Adenomyomatous polyp that passes through the cervix and into the vagina. More typically, these features are found with uterine leiomyomata. Both conditions are most often benign and are treated definitively by surgical excision. The distinction is important given the rarity of the finding reported by this case and because of the implications of differential effect given the specific progressive clinical nature associated with each condition.

Case Presentation

A 42-year-old woman presented to Gynaecology Outpatients with a history of vaginal bleeding for several months, associated with an awareness of an intermittent vaginal mass. The mass could be reduced digitally and was most apparent following coughing or accessory strain. She reported a long history of heavy and irregular menstrual bleeding, often with clotting. She also experienced urinary stress incontinence.

Past obstetric history included four children, three born vaginally and one by caesarean section. She had declined cervical screening for more than five years. Inspection of the external genitalia and vulva was unremarkable. Speculum examination revealed a 3 x 3 cm mass extending into the upper vagina from the external cervical os. The mass was smooth and non-ulcerated but bled with touch. Transvaginal pelvic ultrasound demonstrated a bulky uterus with an endometrial thickness of 5.3 mm and a uniformly enlarged cervix measuring 3.4 x 3.7 x 3.9 cm. An MRI was performed that confirmed a solid-cystic mass-like structure at the level of the cervix measuring 34 x 30 x 44 mm. Myometrial distortion suggested possible fibroid change, although no large fibroids were identified. The features did not suggest a malignant change.

Differential diagnoses included prolapsed uterine myoma, cervical fibroid, or possible cervical carcinoma. After discussing immediate treatment options, a hysteroscopic examination was performed following dilatation of the cervix and curettage of the uterine cavity. Multiple small submucosal fibroids distorted the cavity. A pedunculated, polypoidal lesion arising close to the internal os was excised and was found on histopathological examination to be an endometrioid-type adenomyoma measuring 55mm in size. Endometrial cuttings showed late proliferative changes with sparse fragments of Adenomyomatous change. The patient recovered well post-operatively and has since been booked for a hysterectomy with bilateral salpingectomy.

Discussion

Uterine leiomyoma, more commonly known as fibroids, and adenomyosis are two common but distinct gynaecological conditions that may significantly impact women’s health (1-3), often presenting with pain, abnormal vaginal
bleeding and, more rarely, polyps (4,5). These conditions share overlapping symptoms and clinical features but are inherently different in their pathophysiology, disease progression and clinical management (6, 7, 8, 9).

Uterine leiomyomas are benign smooth muscle tumours that typically originate from the myometrium of the uterine wall. They are the most common benign pelvic tumours in women, affecting approximately 20-50% of women of reproductive age and occurring in up to 70% of women by age 50 (10). Leiomyomas can range from tiny and virtually undetectable to large masses that distort and enlarge the uterus. Symptoms vary widely, with many women being asymptomatic. However, symptoms typically include heavy and prolonged menstrual periods, abnormal bleeding between periods, pelvic pain and pressure, urinary frequency and coital discomfort. (11) Fibroids can affect reproductive health, causing infertility and abnormal pregnancy outcomes such as recurrent miscarriage and obstetric haemorrhage. (11) They may occasionally promote the growth of endometrial polyps or may present as a polypoidal or pedunculated intrauterine mass. The aetiology of leiomyomas is not entirely understood but is believed to involve an interplay of genetic, environmental and hormonal factors, particularly estrogen and progesterone (11,12).

Adenomyosis, on the other hand, occurs when endometrial tissue, which typically lines the uterus, exists within and grows into the muscular wall of the uterus (myometrium) (13, 14, 15). This condition is commonly found in middle-aged women and those with children. Although it can be asymptomatic, adenomyosis often presents with heavy or prolonged menstrual bleeding, severe menstrual cramps, and chronic pelvic pain. The exact cause of adenomyosis is unclear, but it is believed to be associated with various hormonal changes, including those induced by childbirth and menopause (5) While adenomyosis can lead to significant discomfort, it is typically not considered a risk factor for other health complications, although it may be coexistent with pelvic endometriosis (16, 17). In rare cases, adenomyosis may contribute to the formation of polyps and lead to irregular bleeding (18). Typically, they contain haemorrhagic cystic spaces, which are unusual in other polyps such as leiomyomas or malignancies (19). The characteristic sonographic features of polypoid adenomyomas include heterogeneous or homogeneous echogenicity relative to the myometrium, a smooth surface, a poorly defined margin with the underlying myometrium, haemorrhagic foci, and usually, associated adenomyosis in the myometrium (20). When ultrasound evaluation demonstrates a soft tissue mass in the vagina prolapsed from the uterine cavity with a visible connecting stalk, it is termed the broccoli sign (21,22)

Uterine leiomyomas and adenomyosis can cause abnormal vaginal bleeding, typically heavier and longer than normal menstrual bleeding. However, the bleeding associated with leiomyomas is usually due to the increased surface area of the uterine lining, while in adenomyosis, bleeding results from the disruption of the muscular wall of the uterus (23, 24). In both cases, the bleeding may be severe enough to cause anaemia and disrupt a woman’s perceived quality of life (25).

Regarding management, treatment for adenomyosis and leiomyomas can range from watchful waiting to medical therapy (e.g., hormonal treatments) and surgical interventions such as minimally invasive, local resection, or hysterectomy (8,11,14). In both cases though more rarely for the latter, medical management using hormonal treatments to control or mitigate the menstrual cycle may effectively reduce provacateurs for growth, leading to regression or diminution of size and consequent reduction of symptomatic effect (8,11,14).

Conclusion

This case report presents a unique manifestation of uterine adenomyosis, typically a diffuse disease, uniquely presenting as an Adenomyomatous polyp protruding into the vagina. This rare presentation mirrors features commonly associated with uterine leiomyomata. Both adenomyosis and leiomyoma are benign gynaecological conditions causing similar symptoms, such as abnormal vaginal bleeding, but each carries distinct clinical implications. Accurate diagnosis and treatment, typically surgical excision, and ongoing effective medical management, are crucial. Knowledge of the clinical and sonographic appearance of polypoid adenomyomas may facilitate diagnosis and help distinguish these tumours from other uterine polyps. This report advocates the need for heightened clinical awareness and comprehensive differential diagnostic criteria when managing abnormal vaginal bleeding, particularly when associated with evidence of an expansive polypoidal growth.

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