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CASE REPORT

C. North · A. Pickersgill

An unusual case of dyspareunia

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Abstract An acute onset of dyspareunia may result from coital injury to the reproductive tract. We present a case of dyspareunia resulting from a uterosacral ligament haematoma, which appears to have occurred during intercourse. On review of the literature, we found no similar cases reported.

Introduction

An acute onset of dyspareunia may result from coital injury to the reproductive tract. We present a case of dyspareunia resulting from a uterosacral ligament haematoma, which appears to have occurred during intercourse. On review of the literature, we found no similar cases reported.

Case report

A 32-year-old woman presented to her general practitioner (GP) with a 10-day history of pelvic pain that had begun suddenly following an episode of sexual intercourse. She experienced deep dyspareunia that was mainly right-sided. Her symptoms initially seemed to settle but were exacerbated with intercourse. She had previously enjoyed pain-free intercourse and was in a mutually monogamous relationship. There was no abnormal vaginal discharge or bleeding, and she had not noticed any alteration in her bladder or bowel function. The pain was causing her distress because she usually had intercourse three times a day. She was also keen to conceive; however, there were no symptoms or signs of pregnancy.

C. North (✉) · A. Pickersgill
Department of Obstetrics and Gynaecology,
Stepping Hill Hospital, SK3 0JF Stockport, UK
E-mail: carolyn@cnorth8.fsnet.co.uk

Her GP arranged referral to a gynaecologist, and the subsequent vaginal examination revealed a tender, retroverted uterus. Pregnancy was excluded, and empirical treatment for pelvic infection was recommended pending swab results. Initial investigations included transvaginal ultrasound of the pelvis. This demonstrated a normal-sized, retroflexed uterus and normal adnexa.

In view of the woman's persistent symptoms, a diagnostic laparoscopy was performed, which revealed lesions consistent with endometriotic deposits on the superior aspect of the right uterosacral ligament. The left uterosacral ligament also contained a 2-cm, soft, haemorrhagic mass of necrotic appearance. Given the uncertain aetiology of the mass, removal was recommended to elucidate its histological nature.

Removal of the lesion was performed laparoscopically using a 10-mm 0° laparoscope inserted using the open technique through an umbilical incision. Two 5-mm side ports were inserted under direct vision lateral to the inferior epigastric vessels. With the use of monopolar diathermy (90-W cutting current and 60-W coagulation) with microscissors and graspers, the peritoneum underneath the ovarian fossa was incised. The left ureter was identified and dissected laterally, away from the uterosacral ligament. The left uterosacral ligament mass, including a clear margin, was isolated and then removed. The endometriosis was not treated at that time. One litre of an adhesion prophylacticum (Adept) was instilled into the pelvis to discourage adhesion formation. Macroscopic examination of the specimen in theatre suggested that the mass consisted of haematoma.

Histological examination of the mass revealed rather membranous, grey–brown tissue, which consisted of blood clot and fibrofatty tissue. Within this there was organising haematoma with no evidence of active inflammation or neoplasia.

The patient recovered uneventfully and was discharged the next day. Review 2 weeks postoperatively found her to be well and having frequent, pain-free intercourse. Subsequent review at 4 months confirmed her continued recovery with no new symptoms.

Discussion

Dyspareunia, from the Greek for "difficult mating," has many definitions. Part of the definition in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) describes dyspareunia as recurrent or persistent genital pain associated with sexual intercourse. Most commonly, dyspareunia is used to describe the symptom of pain during intercourse.

Dyspareunia occurs in both sexes but is much more common in women. Only a small number of sufferers will present to the medical profession. The incidence depends on the definition used and the population surveyed. The broader the definition, the greater the proportion of women affected. An incidence of approximately 10–15% of sexually active, fertile women is frequently reported, and the incidence is often higher in perimenopausal and postmenopausal women.

The pain of dyspareunia may be experienced in various anatomical locations and at different stages of an episode of intercourse. It has multiple aetiologies, the organic of which are said to be frequently underdiagnosed in favour of the psychosocial [1]. The location and onset of the pain within an episode of intercourse is the best predictor of the presence and type of organicity [2].

In a case such as ours, where dyspareunia is deep in nature and acute in onset, pelvic pathology is likely. The aetiology should, therefore, be investigated thoroughly, and laparoscopic assessment is appropriate [3]. Achieving a diagnosis in this manner is obviously a fundamental step in managing the patient's symptoms.

Common causes of deep dyspareunia include pelvic infection, ectopic pregnancy, endometriosis, adnexal masses, and distorted pelvic anatomy secondary to adhesions. Pelvic infection is increasing in prevalence; therefore, empirical treatment represents reasonable initial management. However, this was an unlikely diagnosis in this case given the patient's monogamous long-term relationship.

The old teaching that "all women are pregnant, and all pregnancies are ectopic until proven otherwise" should never be forgotten. Peritoneal pregnancy involving the uterosacral ligament has been reported [4, 5]. A negative human chorionic gonadotropin test had excluded this diagnosis in our patient. Pelvic ultrasound is a good screening tool for adnexal masses [6], so the negative findings in our patient were unhelpful in pursuing a diagnosis. Magnetic resonance imaging is a sensitive imaging technique for adnexal pathology and may have revealed the mass but is unlikely to have been diagnostic.

The sudden onset of pain during intercourse was suggestive of coital injury. Tears of the vagina, rupture of adnexal masses, and laceration of the round ligament [7] have all been reported as a cause of pain. We have found no reports of laceration or rupture of the uterosacral ligament during intercourse causing dyspareunia.

Following simple investigations, a diagnostic laparoscopy was performed, which confirmed the presence of a mass on the left uterosacral ligament. Various lesions have been reported as causing distortion or swelling of the uterosacral ligament. These include endometriotic lesions, peritoneal pregnancy, ectopic ovarian tissue, cystic teratoma [8], liposarcoma [9], ependymoma [10], endomyometriosis [11], midgut carcinoid tumour [12], and metastatic deposits of local malignancies, such as cervical carcinoma [13, 14].

The most common lesion of the uterosacral ligament is an endometriotic deposit. Deep infiltrating endometriosis is frequently located on the uterosacral ligament. Most lesions, however, are superficial and cause fibrosis with the consequent appearance of a hard nodule. Although superficial endometriosis was seen in our patient, the uterosacral mass did not appear to be endometriosis in characteristics or texture.

Once the diagnosis of a mass was made, a decision was made to remove it in view of the unknown aetiology. However, there is little evidence to support this management, except in recognised deep endometriosis where excision is an appropriate treatment.

Conclusion

Dyspareunia is a common condition, but sufferers often do not seek medical advice. Most will suffer in silence, although some degree of spontaneous recovery has been reported. Of those who do present to the medical profession, many are diagnosed as having pelvic inflammatory disease. Although the incidence of this is increasing, this remains an unlikely diagnosis in older, monogamous women, such as in our case.

Laparoscopy remains the gold-standard investigation for pelvic inflammatory disease but is seldom performed in such circumstances. Perhaps if more laparoscopies were performed in women with dyspareunia, more patients with unusual diagnoses would be found.

It is not possible to know the mechanism of injury to the uterosacral ligament in this case or whether the patient's symptoms would have settled spontaneously with abstinence from intercourse. Because her frequency of sexual intercourse is well above average [15], is of interest whether this contributed to her injury and perpetuated her symptoms.

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