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Chronic pelvic pain: Aetiology and therapy

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Abstract

Gynaecologists are frequently referred women with chronic pelvic pain. These women are often frustrated as they seek to understand their pain and how to manage it. The investigation of women with chronic pelvic pain hinges on taking a full history including social and psychological issues and usually involves laparoscopy and transvaginal ultrasound. Management is often complex and includes taking a multidisciplinary approach as well as using hormonal agents, surgery and psychological interventions.

Keywords: Chronic pelvic pain

1. Introduction

Chronic pelvic pain (CPP) is a debilitating condition, which may impact significantly on a woman's personal health and quality of life [1]. Chronic pelvic pain is common with some studies reporting prevalence as high as one third of all women experiencing chronic pelvic pain. A United Kingdom primary care national database has shown that the incidence and prevalence of consultations for chronic pelvic pain are similar to that of migraine, back pain and asthma [2]. Living with chronic pain usually results in disruption to daily activities. There is wide variation in clinical evaluation of women with chronic pelvic pain. Diagnostic laparoscopy is often carried out on referral to a gynaecologist as an initial investigation to uncover pathologic causes such as endometriosis or adhesions but is negative in over 50% of cases [3]. The underlying explanations for chronic pain are complex. There are many nerves supplying the pelvis as well as abdominal structures and the peritoneum. In chronic pain conditions, pain persists long after original tissue injury or may exist in the absence of any injury or pathology. Treatment of the condition is sometimes unrewarding owing to a lack of effective interventions and more radical surgery, such as hysterectomy, often becomes the final option [1].

There are a number of different definitions of chronic pelvic pain. The Royal College of Obstetricians and Gynaecologist defines chronic pelvic pain as ''intermittent or constant pain in the lower abdomen or pelvis of at least 6 months duration, not occurring exclusively with menstruation or intercourse and not associated with pregnancy'' [4]. It is considered a symptom and not a diagnosis. Other definitions are narrower. For example, chronic pelvic pain may be defined as a non-cyclical pain of greater than 6 months, and is of sufficient severity as to cause functional disability or lead to medical care [5]. In this chapter we did not include pelvic pain considered to be caused by endometriosis, pain arising from pelvic inflammatory disease, interstitial cystitis and pain from irritable bowel syndrome. Women with dysmenorrhoea where no pathology was found were considered to have chronic recurring pelvic pain.

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2. Methodology

For aetiology, we searched general bibliographic databases: Medline (1966–2004), Embase (1980–2004) and PSYCHINFO (1887–2004). We also searched specialist computer databases: the Cochrane Library (2005:4) and SCISEARCH (1974–2004). Our search term combination for electronic databases, based on published advice, was as follows: MeSH headings, text words and word variants for ''dysmenorrhoea'', ''dyspareunia'' and ''chronic pelvic pain''. Relevant terms for aetiological factors e.g. causal, odds ratio, relative risk etc. were used to combine with terms for relevant study designs e.g. cohort, risk, case control studies, etc. and the search was restricted to human and female. We also hand searched the bibliographies of all relevant reviews and primary studies to identify articles not captured by electronic searches.

The reference lists of articles identified by this search strategy for treatment were searched for further studies. Each study was assessed for study design and preference was given for randomised controlled trials.

The differential diagnoses of a woman with chronic pelvic pain include:

- Gynaecological: endometriosis, adhesions (chronic pelvic inflammatory disease), leiomyoma, pelvic congestion syndrome and adenomyosis
- Gastrointestinal disease: including constipation, irritable bowel syndrome, diverticulitis, diverticulosis, chronic appendicitis and Meckel's diverticulum
- Genitourinary disease: including interstitial cystitis, bladder dyssynergia and chronic urethritis
- Myofascial disease: including fasciitis, nerve entrapment syndrome and hernia (inguinal, femoral, spigelian, umbilical and incisional)
- Skeletal disease: including scoliosis, L1-2 disc disorders, spondylolisthesis and osteitis pubis
- Psychological disorders: including somatisation, psychosexual dysfunction and depression
- Neuropathic disorders: pudendal nerve entrapment and spinal cord neuropathies

3. Pelvic congestion syndrome

There have been case control studies to suggest that pelvic varicosities and congestion unrelated to parity or the menstrual cycle were commonly found in women with the pelvic-pain syndrome [6]. The control group were parous women undergoing sterilisation. Congestive dysmenorrhoea, deep dyspareunia and postcoital ache were common findings in women with pelvic congestion and 60% had evidence of significant emotional disturbance. The combination of tenderness on abdominal palpation over the ovarian point and a history of postcoital ache was 94% sensitive and 77% specific for discriminating pelvic congestion from other causes of pelvic pain [7].

4. Psychosomatic causes

In medical practice symptoms are seen as being physical, that is ''real'', or psychological, that is, outside the realm of expertise of the non-psychiatric physician. If there is no obvious illness, but the patient's complaints are intense, a search ensues for the cause of the pain. In gynaecological practice, this can end in multiple abdominal and pelvic procedures. Many women who are not helped by surgery are finally referred for psychiatric treatment. The patient feels angry, refuses psychological help and continues her search for a somatic cure elsewhere [8]. Emotional factors play a significant role, even if the patient has an identifiable physical dysfunction. Pain may cause depression or anxiety, depression may manifest itself as physical pain, or the two may evolve simultaneously. CPP patients have been shown to endorse significantly more physical problems than do patients with other gynaecologic disorders. There is higher likelihood of experiencing diarrhoea, low back pain, nausea, bloating in these women. CPP patients were also found to be more likely than controls to have undergone previous non-gynaecologic surgery and to have sought treatment for unrelated medical complaints [9]

5. Risk factors for chronic pelvic pain

A comprehensive review, evaluating over 60 risk factors in 122 studies, has demonstrated strong and consistent associations between CPP and presence of pelvic pathology, history of abuse and coexistent psychological morbidity [10]. In this review, studies of menstrual pain (all types of dysmenorrhoea), pain related to intercourse (dyspareunia) and chronic non-cyclical pain, localised in the lower abdomen and pelvis and lasting 3 months or more in duration, were included. Studies on women with vulvar pain only were ineligible. There were no studies with women with endometriosis in the dysmenorrhoea subgroup but there were three studies where women with endometriosis were included in the non-cyclical CPP subgroup.

Age less than 30 years, low body mass index, smoking, earlier menarche (<11 years), longer cycles, heavy menstrual flow, nulliparity, premenstrual syndrome, sterilisation, clinically suspected pelvic inflammatory disease (PID), sexual abuse and psychological symptoms were associated with dysmenorrhoea. Younger age at first childbirth, exercise and oral contraceptives were protective for dysmenorrhoea. Menopause, PID, sexual abuse, anxiety and depression were found to be associated with