

Is Idiopathic Chronic Pelvic Pain a Treatable Entity: A Comment

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Commentary

Chronic pelvic pain (CPP) is a common condition in women of reproductive age, but the underlying patho-physiology remains poorly understood. CPP is defined as intermittent or constant pain of six or more month duration that localizes to the anatomic pelvis, anterior abdominal wall at or below the umbilicus, the lumbo-sacral back or the buttocks that is severe enough to cause functional disability or requiring medical or surgical treatment [1].

Prevalence of chronic pelvic pain is estimated to be 38 per 1000 in women aged 15–73 years [2].

Gynaecologic pathology responsible for CPP can be endometriosis, adenomyosis, fibroids, ovarian remnant syndrome, chronic PID or cervical stenosis. Other pelvic organs like gastro-intestinal tract or urinary tract can be a source of pelvic pain. Musculo-skeletal, neurological and psycho-social factors are also found to be involved in some cases [3]. Thus, CPP is a symptom, not a diagnosis and dysmenorrhea, deep dyspareunia, and non-cyclic pelvic pain are its main constituents [4].

The common presentation of CPP is acyclic lower abdominal pain in about 80% of women, congestive dysmenorrhea in around 26 % and pelvic tenderness in 20% of cases [5]. CPP is also associated with symptoms of depression, anxiety, low quality of life, low productivity, decreased energy, sexual dysfunction and relationship problems [6,7].

The work-up of a patient with CPP begins with a good history and a thorough physical examination. It is useful to begin by trying to understand the nature of the pain itself and then trying to find a cause [8]. Lundberg et al., found that 51% of women presenting with a normal pelvic examination had some organic pathology [9]. Hence there arises a need for imaging the pelvis by sonography and direct visualization of pelvis by laparoscopy. However, laparoscopy fails to identify underlying pathology in upto 40% of women [1,10]. In a US population based study, 61% women with pelvic pain symptoms did not have a clear diagnosis [7]. Thus in this particular group of women without any identifiable pathology, treatment remains an enigma and role of laparoscopy is still a dilemma.

Treatment of CPP may consist of two approaches. One is to treat chronic pain itself as a diagnosis, and the other is to treat diseases or disorders that might be a cause of or a contributor to CPP. These two modes of treatment are not mutually exclusive, and in most of the cases effective treatment is best achieved by using both of them.

Different Modes of Treatment

- Hormonal therapy is thought to act in a non-specific manner by suppressing ovarian activity; this is known to relieve dysmenorrhea and oral contraceptive pills (OCPs) that contain estrogen and

progesterin can be used for the purpose [11]. OCPs suppress ovulation and reduce growth of endometrial tissue, thus decreasing both menstrual flow and prostaglandin production [12]. OCPs have also shown down-regulation of cell proliferation and acceleration of apoptosis in the eutopic endometrium of women with endometriosis [13]. Hormonal therapy has shown efficacy in treatment of functional bowel disease and chronic, cyclic, painful bladder symptoms in women, even when standard therapies have failed [14,15].

- Diagnostic/Operative Laparoscopy - The initial role of diagnostic laparoscopy in CPP is not well proven [1] and the role of operative laparoscopy like laparoscopic uterine nerve ablation, presacral neurectomy, excision or ablation of endometriotic lesions plus adhesiolysis is mainly in the treatment of endometriosis [16,17].
- Non-conservative surgical procedures, such as hysterectomy, although effective in terms of pain relief, are not acceptable by women who desire to preserve their reproductive potential and can lead to a decrease in quality of life [18].

Previous studies have found considerable improvement in symptoms using hormonal methods like medroxy-progesterone acetate, goserelin, oral hormonal pill, gestrinone and leuprolide depot, LNG-IUS in treatment of endometriosis associated pelvic pain and dysmenorrhea [19-24].

Few studies have been done which have shown the results of hormonal methods in treatment of chronic pelvic pain not associated with endometriosis.

The value of medroxyprogesterone acetate (MPA) and of psychotherapy in the treatment of lower abdominal pain due to pelvic congestion was assessed in a randomized controlled trial done by Farquhar et al (1989). During treatment, MPA showed a significant benefit in terms of a reduction in visual analogue scale pain score [25].

Lentz et al., (2002) used leuprolide acetate and OCPs in chronic painful bladder symptoms and pelvic pain related to menstrual cycle, reported improvement even when endometriosis was not identified by laparoscopy [15].

Vercellini et al., in 2003 reported that avoidance or delaying of menstruation by continuous OCP administration for two years significantly reduced the severity of dysmenorrhea in women who experienced recurrent dysmenorrhea despite cyclic OCP use [26].

Ling et al., proved that depot leuprolide was effective and safe for treating women with chronic pelvic pain and clinically suspected endometriosis, confirming the potential of its empiric use in these patients [27].

ACOG states that therapy with GnRH agonist is an appropriate approach to the management of women with CPP, even in the absence

of surgical confirmation and when detailed initial evaluation fails to demonstrate some other cause of pelvic pain [28].

However, there is a paucity of randomized controlled trials comparing therapeutic options for optimal management of chronic pelvic pain as a symptom, whereas stronger evidences are available for endometriosis related pelvic pain. Furthermore, we need an empirical

approach to treat chronic pelvic pain where no etiology can be identified by history, physical examination, routine biochemistry and ultrasonography. Laparoscopy and other surgical methods can be considered if the empirical treatment fails to relieve the symptoms (Figure 1). However, this concept needs large randomized trials for its validity.

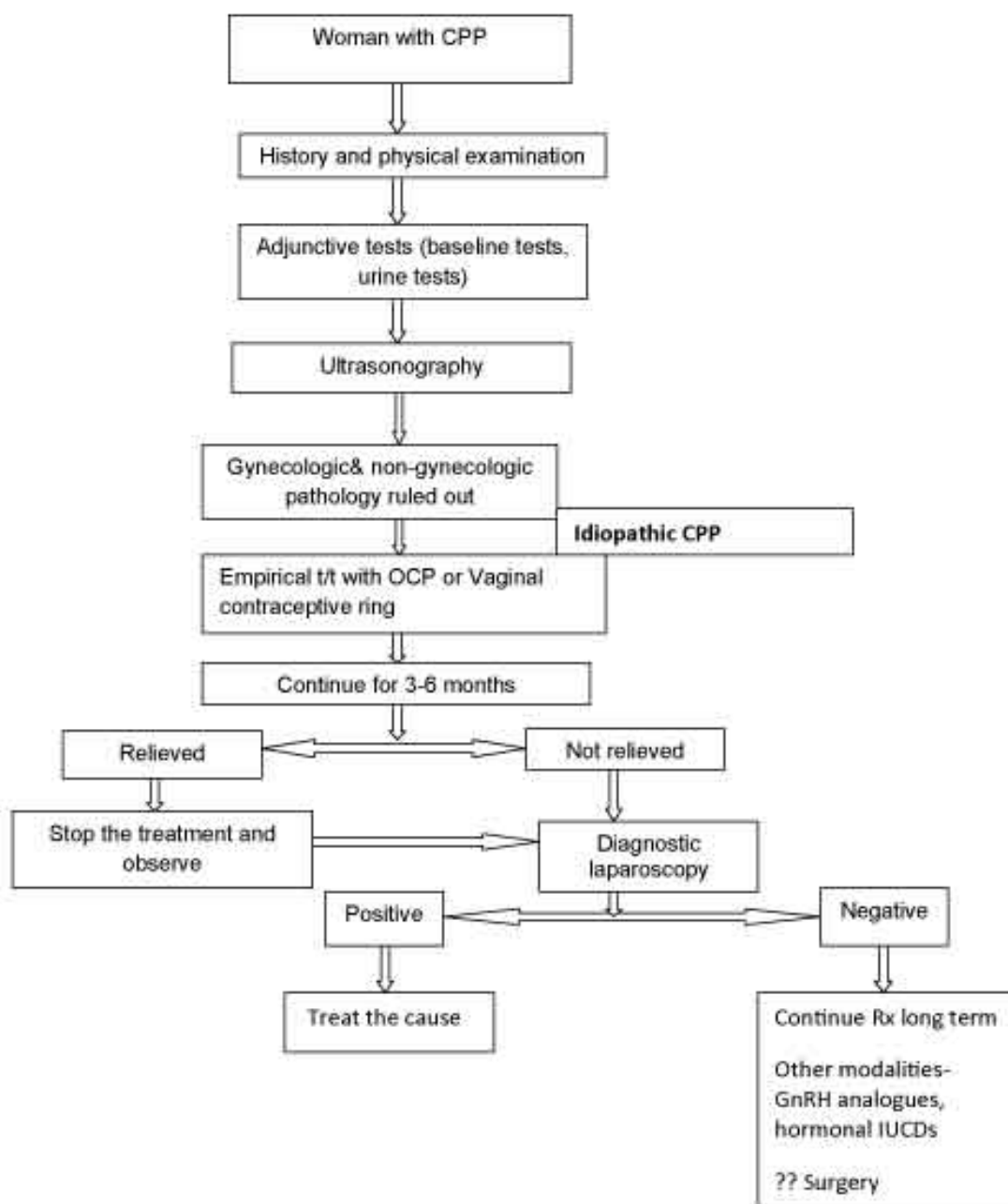


Figure 1: Approach to women with chronic pelvic pain.

Oral hormonal pills, injections, implants and hormone releasing intrauterine devices have been reported to relieve symptoms in chronic

pelvic pain, however, long term daily oral drug treatment is restricted by poor compliance and unacceptable side effects [29,30]. Newer

methods like injections, implants and intrauterine devices require administration by trained personnel with side effects like unpredictable bleeding patterns and loss of bone density.

Recently the vaginal ring has been developed, for contraceptive use, and it releases 15 mcg of ethinylestradiol and 120 mcg of etonogestrel per day. Vaginal administration has the advantage of once-a-month administration, avoidance of hepatic first pass metabolism and gastrointestinal side effects [31,32]. In addition, estrogen and progesterone are administered at a lower dosage compared to oral therapy.

Vercellini et al., (2010) did a study to evaluate the efficacy and tolerability of a contraceptive vaginal ring and transdermal patch in the treatment of endometriosis-associated pain. Pain symptoms were reduced by both treatments, with the ring being more effective than the patch in women with rectovaginal lesions [33].

The present study discovered that vaginal hormonal administration is comparable in efficacy to low dose combined oral hormonal pill and can be considered an option in women with idiopathic chronic pelvic pain without subjecting each woman to diagnostic laparoscopy [34]. Thus it is proposed that in women with chronic pelvic pain with no obvious etiology, hormones may be a first line of management and vaginal hormonal administration can be better option due to fewer side effects and better satisfaction [29-34].

References

1. Bordman R, Jackson B (2006) Below the belt: Approach to chronic pelvic pain. *Can Fam Physician* 52: 1556-1562.
2. Zondervan KT, Yudkin PL, Vessey MP, Dawes MG, Barlow DH, et al. (1999) Prevalence and incidence of in primary care of chronic pelvic pain in women: Evidence from a national general practice database. *Br J Obstet Gynaecol* 106: 1149-1155.
3. Won HR, Abbott J (2010) Optimal management of chronic cyclical pelvic pain: an evidence-based and pragmatic approach. *Int J Womens Health* 2: 263-277.
4. Yuan CC (2006) Laparoscopic uterosacral nerve ablation and chronic pelvic pain. *J Chin Med Assoc* 2006; 69: 101-103.
5. Iftikhar R (2008) Outcome of laparoscopy in chronic pelvic pain. *J Surg Pak* 13: 155-158.
6. Haggerty CL, Schulz R, Ness RB (2003) Lower quality of life among women with chronic pelvic pain after pelvic inflammatory disease. *Obstet Gynecol* 102: 934-939.
7. Mathias SD, Kuppermann M, Liberman RF, Lipschutz RC, Steege JF (1996) Chronic pelvic pain: prevalence, health-related quality of life, and economic correlates. *Obstet Gynecol* 87: 321-327.
8. Gunter J (2003) Chronic pelvic pain: an integrated approach to diagnosis and treatment. *Obstet Gynecol Surv* 58: 615-623.
9. Lundberg WI, Wall JE, Mathers JE (1973) Laparoscopy in evaluation of pelvic pain. *Obstet Gynecol* 42: 872-876.
10. Hebbar S, Chawla C (2005) Role of laparoscopy in chronic pelvic pain. *J Minim Access Surg* 1: 116-120.
11. Olive DL, Pritts EA (2001) Treatment of endometriosis. *N Engl J Med* 345: 266-275.
12. Crosignani P, Olive D, Bergvist A, Luciano A (2006) Advances in the management of endometriosis: an update for clinicians. *Hum Reprod Update* 12: 179-189.
13. Meresman GF, Auge L, Baranao RI, Lombardi E, Tesone M, et al. (2002) Oral contraceptives suppress cell proliferation and enhance apoptosis of eutopic endometrial tissue from patients with endometriosis. *Fertil Steril* 77: 1141-1147.
14. Mathias JR, Clench MH, Abell TL, Koch KL, Lehman G, et al. (1998) Effect of leuprolide acetate in treatment of abdominal pain and nausea in premenopausal women with functional bowel disease: a double-blind, placebo-controlled, randomized study. *Dig Dis Sci* 43: 1347-1355.
15. Lentz GM, Bavendam T, Stenchever MA, Miller JL, Smallbridge J (2002) Hormonal manipulation in women with chronic, cyclic irritable bladder symptoms and pelvic pain. *Am J Obstet Gynecol* 186: 1268-1271.
16. Swank DJ, Swank-Bordewijk SC, Hop WC, van Erp WF, Janssen IM, et al. (2003) Laparoscopic adhesiolysis in patients with chronic abdominal pain: a blinded randomised controlled multi-centre trial. *Lancet* 361: 1247-1251.
17. Ojha K, Matah A (2008) Surgical management of chronic pelvic pain. *Obstet Gynec and Reprod Med* 18: 236-240.
18. MacDonald SR, Klock SC, Milad MP (1999) Long-term outcome of non-conservative surgery (hysterectomy) for endometriosis associated pain in women <30 years old. *Am J Obstet Gynecol* 180: 1360-1363.
19. Vercellini P, Trespidi L, Colombo A, Vendola N, Marchini M, et al. (1993) A gonadotropin-releasing hormone agonist versus a low-dose oral contraceptive for pelvic pain associated with endometriosis. *Fertil Steril* 60: 75-79.
20. Vercellini P, De Giorgi O, Oldani S, Cortesi I, Panazza S, et al. (1996) Depot medroxyprogesterone acetate versus an oral contraceptive combined with very-low-dose danazol for long term treatment of pelvic pain associated with endometriosis. *Am J Obstet Gynecol* 175: 396-401.
21. Gestrinone Italian Study Group (1996) Gestrinone versus a gonadotropin-releasing hormone agonist for the treatment of pelvic pain associated with endometriosis: a multicenter, randomized, double-blind study. *Fertil Steril* 66: 911-919.
22. Parazzini F, Di Cintio E, Chatenoud L, Moroni S, Ardovino I, et al. (2000) Estroprogestin vs. gonadotrophin agonists plus estroprogestin in the treatment of endometriosis-related pelvic pain: a randomized trial. *Eur J Obstet Gynecol Reprod Biol* 88: 11-14.
23. Petta CAI, Ferriani RA, Abrao MS, Hassan D, Rosa E Silva JC, et al. (2005) Randomized clinical trial of a levonorgestrel-releasing intrauterine system and a depot GnRH analogue for the treatment of chronic pelvic pain in women with endometriosis. *Hum Reprod* 20: 1993-1998.
24. Harada T, Momoeda M, Taketani Y, Hoshiai H, Terakawa N (2008) Low dose oral contraceptive pill for dysmenorrhea associated with endometriosis: a placebo-controlled double-blind, randomized trial. *Fertil Steril* 90: 1583-1588.
25. Farquhar CM, Rogers V, Franks S, Pearce S, Wadsworth J, et al. (1989) A randomized controlled trial of medroxyprogesterone acetate and psychotherapy for the treatment of pelvic congestion. *Br J Obstet Gynaecol* 96: 1153-1162.
26. Vercellini P, Frontino G, De Giorgi O, Pietropaolo G, Pasin R, et al. (2003) Continuous use of oral contraceptive for endometriosis-associated recurrent dysmenorrhea that does not respond to a cyclic pill regimen. *Fertil Steril* 80: 560-563.
27. Ling FW (1999) Randomized controlled trial of depot leuprolide in patients with chronic pelvic pain and clinically suspected endometriosis. *Pelvic Pain Study Group. Obstet Gynecol* 93: 51-58.
28. Moghissi KS, Winkel CA (1999) ACOG Practice Bulletin: Clinical management guidelines for obstetrician-gynecologists.
29. Rosenberg MJ, Waugh MS, Meehan TE (1995) Use and misuse of oral contraceptives: risk indicators for poor pill taking and discontinuation. *Contraception* 51: 283-288.
30. Rosenberg M, Waugh MS (1999) Causes and consequences of oral contraceptive noncompliance. *Am J Obstet Gynecol* 180: 276-279.
31. Timmer CJ, Mulders TM (2000) Pharmacokinetics of etonogestrel and ethinylestradiol released from a combined contraceptive vaginal ring. *Clin Pharmacokinet* 39: 233-242.
32. van den Heuvel MW, van Bragt AJ, Alnabawy AK, Kaptein MC (2005) Comparison of ethinylestradiol pharmacokinetics in three hormonal contraceptive formulations: the vaginal ring, the transdermal patch and an oral contraceptive. *Contraception* 72: 168-174.

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33. Vercellini P, Barbara G, Somigliana E, Bianchi S, Abbiati A, et al. (2010) Comparison of contraceptive ring and patch for the treatment of symptomatic endometriosis. *Fertil Steril* 93: 2150-2161.
34. Priya K, Rajaram S, Goel N (2016) Comparison of combined hormonal vaginal ring and low dose combined oral hormonal pill for the treatment of idiopathic chronic pelvic pain: a randomised trial. *Eur J Obstet Gynecol Reprod Biol* 207: 141-146.