

A case of acute pelvic pain responding to escitalopram but not to anti-inflammatory drugs

Koji Hatano, MD, PhD¹, Takeshi Terao, MD, PhD^{1,2}, Nobuyoshi Ishii, MD, PhD¹,
Ippei Shiotsuki, MD, PhD¹, Yuji Yamanaka, MD², Ayano Otsuka, MD², Nobuhiko Hoaki, MD, PhD²

¹Department of Neuropsychiatry, Oita University Faculty of Medicine

²Hoaki Hospital

ABSTRACT

We showed a 36-year-old male patient suffering from acute pelvic pain responding to escitalopram but not to anti-inflammatory drugs. To our knowledge, this is the first report showing the effects of escitalopram on acute pelvic pain. Further studies are required to substantiate the present findings.

Keywords: acute pelvic pain, somatic symptom disorder, pain, escitalopram

Received October 20, 2017 / Accepted November 6, 2017 / Published December 15, 2017.

Introduction

Prostatitis describes a combination of infectious diseases (acute and chronic bacterial prostatitis), chronic pelvic pain syndrome (CPPS), and asymptomatic inflammation. Krieger et al. [1] investigated the prevalence of prostatitis symptoms in five studies surveying 10,617 men and showed that 873 participants met various criteria for prostatitis, representing an overall rate of 8.2%, with prevalence ranging from 2.2 to 9.7%. CPPS is defined as “urologic pain or discomfort in the pelvic region, associated with urinary symptoms and/or sexual dysfunction, lasting for at least 3 of the previous 6 months”. In the absence of any identifiable pathology such as cancer, culturable infection, or anatomic abnormalities, it is often accompanied by “associated negative cognitive, behavioral, sexual or emotional consequences” [2].

Although most pain research has taken a duration of 6 months or more as the minimum criterion for ‘chronic’ and the definition of CPPS was also ap-

plied to this 6 months rule, there is acute pelvic pain which also disturbs patient’s function of work and daily life. In this case report, we showed a case of acute pelvic pain responding not to anti-inflammatory drugs, but to escitalopram. To our knowledge, this is the first report showing the effects of escitalopram on acute pelvic pain. We obtained a signed informed consent from the patient for the publication of this case report.

Case report

A 36-year-old male patient, who was an office worker and had hyperthymic temperament, had suffered from discomfort in his perineum since he felt a sharp pain just after ejaculation during masturbation on Christmas Eve. He had no history of psychiatric disorder and lived with his wife and two children. He saw several urologists who found no clear abnormality and diagnosed him as suffering from chronic prostatitis. Although he took loxoprofen, cernitin, and so on, there was no improvement in his symptoms. Due to the lack of the effect from

Corresponding author: Takeshi Terao, MD, PhD, Professor, Department of Neuropsychiatry, Oita University Faculty of Medicine, Idaigaoka 1-1, Hasama-machi, Yufu-city, Oita 879-5593, Japan. e-mail, terao@oita-u.ac.jp Tel: +81-97-586-5823 Fax: +81-97-549-3583

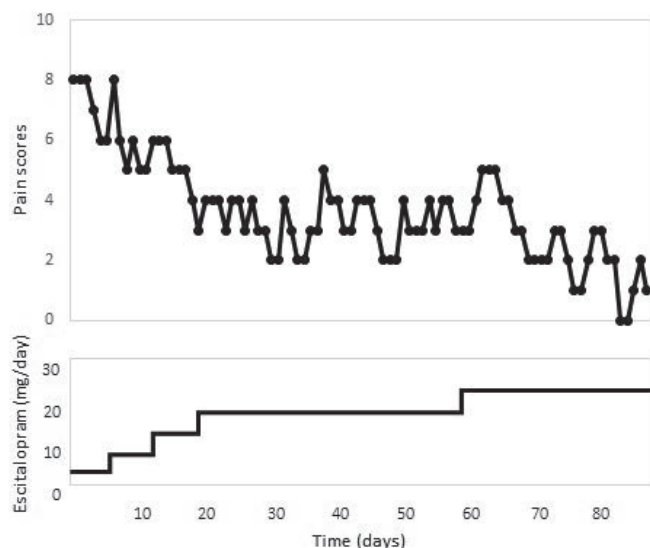


Figure 1. Time course of pain scores rated by visual analogue scale and the doses of escitalopram

these drugs, he saw a psychiatrist who diagnosed him as suffering from psychosomatic disease and prescribed alprazolam although this also had no effect.

Finally, he was referred to one of the authors (T.T.) 22 days after the onset of the pain. His main complaint was not only discomfort in his perineum but also sharp pain in his penis during erection and when standing up. Due to this pain, he was absent from his work and stayed at home as he was uncomfortable throughout the day. He was not depressive, but somewhat anxious. He stated that a recent heavy work load might be associated with his pain. Serum chemistry, complete blood cell counts, thyroid function testing, and the magnetic resonance imaging of the brain revealed no abnormality. According to DSM-5, he was diagnosed as suffering from Somatic Symptom Disorder (with predominant pain).

In view of a prior open study [3] showing the effect of sertraline on CPPS and because of our experience was that escitalopram tends to be more effective than sertraline, we selected escitalopram for the treatment of this case. Five mg per day of escitalopram was started and then increased gradually to 25 mg per day as shown in Figure 1. In response to the increase of escitalopram, the patient's pain and discomfort gradually but steadily improved and remitted. Fifty-four days after starting escitalopram, he was able to return to his former position on a part time basis (3 hours a day) and subsequently, 87 days after starting escitalopram, he

returned to full time work (8 hours a day). He could have sexual intercourse with his wife but it took a longer time to ejaculate, without orgasms. Three months after starting escitalopram, he contracted influenza and discontinued escitalopram by his own choice. However, there was no relapse of his pain and discomfort, and he was able to experience orgasms again while having intercourse with his wife.

Two months after discontinuing escitalopram, he said that there was no pain in his penis during erection, or whilst ejaculating although there was only a little discomfort in his perineum. He could work as before, but he took a rest every one hour to prevent his pain. Moreover, although he previously did not assist his wife with family chores before the onset of his disease, he began cooking for his family and taking care of his children while taking administrative leave. After returning to work, he still continued to cook for his family and his focus changed from an emphasis primarily on work, to balancing work and life.

Discussion

In the present case, acute pelvic pain consisting of not only discomfort in his perineum but also sharp penile pain during erection in his penis and when standing up, which was triggered by ejaculation during masturbation, symbolically on the Christmas Eve. There may have been an association with the cold relationship he had with his wife probably due to his emphasis on work rather than his family. He had hyperthymic temperament and his daily life was exclusively devoted to his work but not to his family.

His acute pelvic pain forced him to take administrative leave and seek medical treatment and he was initially given anti-inflammatory drugs and then later escitalopram. From the viewpoint of the time course of drug titration (Figure 1), escitalopram was effective for his acute pelvic pain, but a placebo effect from escitalopram or a naturalistic resolution cannot be completely ruled out. Other possible factors are that taking administrative leave and his making peace with his wife might have reduced his stressful situation and thereby mitigated his pain. Potentially a combination of all of these factors including the effects of escitalopram may have led to recovery. Interestingly, his hyperthymic temperament was also apparently mitigated after his

acute pelvic pain remitted, and moved the focus of his life from purely work to balancing work and life.

As for the treatment of CPPS, a meta-analysis showed that meparticin, percutaneous tibial nerve stimulation, and triple therapy comprised of doxazosin + ibuprofen + thicolchicoside resulted in clinically and statistically significant reduction in the National Institutes of Health-Chronic Prostatitis Symptom Index (NIH-CPSI) total scores whereas alpha-blockers, antibiotics, and combinations of the two failed to show statistically or clinically significant NIH-CPSI reductions [2]. The effects of antidepressant drugs such as amitriptyline, sertraline, duloxetine, nortriptyline, citalopram, and venlafaxine for the management of CPPS has been reported [4, 5]. It is possible that antidepressants may be effective in alleviating chronic pelvic pain either by acting directly on the neural mechanisms of pain or by reducing depressive symptoms that may influence the experience of pain or the capacity to cope with the pain [5]. In the case of this patient, he was not depressed and the latter possibility is unlikely. Although the present case was not CPPS but acute pelvic pain syndrome, escitalopram was effective, and without adequate treatment, his acute pelvic pain might have shifted to CPPS after 6 months. The rate from acute pelvic pain to CPPS may depend on whether individual treatments are appropriately provided for each patient suffering from acute pelvic pain due to various causes. For example, of the 437 patients with acute bacterial prostatitis, 1.3% (6/437) progressed to chronic bacterial prostatitis and 10.5% (46/437) progressed to inflammatory CPPS [6].

With regard to escitalopram, we selected escitalopram for acute pelvic pain of this case because a prior open study [3] showing the effect of sertraline on CPPS and because of our experience was that escitalopram tends to be more effective than sertraline. Although a review showed that escitalopram may be more effective than sertraline [7], this can be applied to depression but not to acute pelvic pain. To our knowledge, there are no clinical reports specifically investigating the effects of antidepressants on acute pelvic pain. The action of selective serotonergic reuptake inhibitors in pain conditions is controversial and there is a lack of evidence for a benefit in the treatment of neuropathic pain [8]. For example, only small effect of paroxetine and citalopram, or no effect of fluoxetine, has been

reported in painful diabetic neuropathy [8]. Antidepressant's action on the noradrenergic system rather than serotonergic system appears important [8]. Then, why escitalopram was effective for acute pelvic pain of this patient? Placebo effects were unlikely because anti-inflammatory drugs were not effective. Considering the hypochondriacal tendency of this patient such as seeing several urologists, there might have been an interaction between his anxiety and acute pelvic pain where escitalopram improved his anxiety directly and thereby further mitigated acute pelvic pain which directly but modestly responded to escitalopram. Nonetheless, the indication of escitalopram is depression and social anxiety disorder where 25 mg per day is not permitted in Japan, and our psychiatrists should bear this in mind while prescribing escitalopram.

The present findings suggest that escitalopram may be effective for acute pelvic pain. This is, to our knowledge, the first case showing the effect of escitalopram on pelvic pain and further studies are required to substantiate the present findings.

Conflict of Interest

Takeshi Terao received lecture fees from Mochida pharmaceutical company. The other authors have no conflict of interest.

REFERENCES

- [1] Krieger JN, Lee SW, Jeon J, et al. Epidemiology of prostatitis. *Int J Antimicrob Agents*. 2008; 31(Suppl. 1): S85-90.
- [2] Cohen JM, Fagin AP, Hariton E, et al. Therapeutic intervention for chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS): a systematic review and meta-analysis. *PLoS One*. 2012; 7(8): e41941.
- [3] Lee RA, West RM, Wilson JD. The response to sertraline in men with chronic pelvic pain syndrome. *Sex Transm Infect*. 2005; 81(2): 147-149.
- [4] Karp JF. Venlafaxine XR and chronic pelvic pain syndrome. *J Clin Psychiatry*. 2004; 65(6): 880-881.
- [5] Papatreou C, Skapinakis P, Giannakis D, et al. Antidepressant drugs for chronic urological pelvic pain: an evidence-based review. *Adv Urol*. 2009; 2009: 797031.
- [6] Yoon BI, Han DS, Ha US, et al. Clinical courses following acute bacterial prostatitis.

Prostate Int. 2013; 1(2): 89-93.

- [7] Sanchez C, Reines EH, Montgomery SA. A comparative review of escitalopram, paroxetine, and sertraline: Are they all alike? *Int Clin Psychopharmacol.* 2014; 29(4): 185-196.

- [8] Kremer M, Salvat E, Muller A, et al. Antidepressants and gabapentinoids in neuropathic pain: Mechanistic insights. *Neuroscience.* 2016; 338: 183-206.