



Successful opioid dose reduction after ganglion impar block in a patient with postoperative micturition pain

Yuka Matsuki, Maki Mizogami and Kenji Shigemi

ABSTRACT

Department of Anesthesiology & Reanimatology, Faculty of Medical Sciences, University of Fukui, Fukui, (Japan)

Correspondence:

Yuka Matsuki, MD,
Department of Anesthesiology & Reanimatology
Faculty of Medicine Sciences,
University of Fukui, 23-3
Eiheijicho, Yoshidagun, Fukui
910-1193, (Japan);
Tel: +81-776-61-8391;
Fax: +81-776-61-8116;
E-mail: ymatsuki@u-fukui.ac.jp

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A 68-year-old man underwent abdominoperineal resection to treat anal fistula carcinoma three years previously, following which he developed perineal pain and dysuria and was prescribed sustained-release and immediate-release oxycodone by his primary physician to treat the cancer pain. The patient subsequently received dose increases and rescue doses of opioids in accordance with the WHO method for cancer pain relief. However, since pain management became difficult, he was referred to our pain clinic. At the time of referral, the tumor had completely disappeared, and the pain was due to chronic postoperative pain and not cancer pain. First, the rescue agent was switched from immediate-release oxycodone and oral fentanyl tablet to acetaminophen 500 mg/dose. Ganglion impar block was performed and the prescribed fixed opioid dose was reduced at this point. In this case, the pain was due to postoperative wound pain, and its treatment by the WHO method for cancer pain relief was not indicated due to the risk of opioid-dependency. Treatment and management conforming to opioid analgesic indications for non-cancer pain were necessary.

Key words: Ganglion impar block; Chronic pain; Cancer pain; Neuropathic pain

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INTRODUCTION

Pain frequently overshadows the life of cancer patients.^{1,2} Pain arising during treatment in cancer patients may be due to: (1) a relapse or increase in the metastases of cancer, (2) secondary to cancer treatment, (3) newly occurring disease, and (4) worsening of the preexisting disease.³ The 2nd-4th causes are more relevant to long-term cancer survivors than the first one. Cancer pain is pharmacologically managed according to the WHO pain relief ladder, but when the second through fourth types of chronic pain are not caused by cancer itself, opioid analgesics must be prescribed for non-cancer chronic pain.

We report the use of ganglion impar block to successfully reduce the opioid dose in a patient on high-dose opioid therapy based on the WHO pain relief ladder for perineal pain and painful micturition following the resection of his anal fistula carcinoma.

CASE REPORT

Written informed consent for publication of this case report was obtained from the patient.

Anal fistula carcinoma was diagnosed in a 68-year-old man. Complaining of pain in the anal region, the patient was started on a non-steroidal anti-inflammatory drug (NSAID). After about one month, the patient underwent abdominoperineal resection of the rectum, which relieved his anal pain, but subsequently he developed perineal pain and dysuria. His primary physician, considering these conditions to be cancer pain, advised treatment with controlled-release oxycodone 20 mg/day, immediate-release oxycodone 20 mg/day, and pregabalin 300 mg/day. Duloxetine 20 mg/day was added as his pain intensified. About 2 months after, the patient developed generalized edema and cardiac failure attributable to pregabalin, which was discontinued

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along with the NSAIDs. He continued to receive higher opioid doses and rescue therapy for perineal pain and dysuria according to the WHO pain relief ladder. He was referred to our department after about 3 years, when his pain failed to be managed with the drug therapy.

His pain at the initial visit was 81 mm on a visual analogue scale (VAS). Abdominal computed tomography (CT) showed no tumor remnant. His prescription amounted to a 10.5 mg fentanyl patch every 3 days, 2 to 5 doses/day of immediate-release oxycodone at 10 mg/dose, 4 to 6 doses/day of fentanyl buccal tablets at 200 μ g/dose, and 75 mg/day of tramadol. Although the pain he initially experienced was likely cancer pain, his postoperative perineal pain and dysuria seemed to be neuropathic pain, given that his tumor was completely resected. After we told him about the disadvantages of continuing opioid therapy, the patient requested to be taken off opioids, but he expressed his concern that discontinuation would intensify his pain. After further consultation with the patient, we formulated a plan to treat the pain with a nerve block to allow dose reduction of his ongoing and rescue opioids. At this first visit, we switched his rescue treatment from immediate-release oxycodone and fentanyl buccal tablets to 500 mg/dose of acetaminophen. His pain resolved following ganglion impar block with 4 mL of the local anesthetic ropivacaine 0.375%. Subsequently, we reduced his ongoing opioid dose and then later repeated the block with anhydrous ethanol. As his dysuria failed to resolve, we reduced his ongoing opioids to a 2.1 mg fentanyl patch every 3 days, and also reduced the acetaminophen rescue dose. With this therapy, VAS scores stabilized at about 10 mm. His pain gradually improved and he required no more analgesic treatment.

DISCUSSION

When starting opioid treatment, our patient appeared to have pain secondary to cancer treatment. The management of pain with increasing doses of opioids and rescue treatment according to WHO pain relief ladder, which is continued until the pain is relieved, is more suitable for a relapsing pain or pain with an increased metastases of cancer. But it is not suitable not for the postoperative perineal pain and/or dysuria (as in our patient), because of the risk of opioid dependence. Our patient was put on opioid therapy for suspected cancer pain following the resection of anal fistula carcinoma. As his pain intensified, he was treated for postoperative pain according to the WHO pain relief ladder with higher ongoing opioid doses

and rescue therapy. Patients with a history of cancer are often casually given opioid analgesics, although the pain they have must be confirmed to be cancer pain when opioid treatment is initiated. Nerve block and other interventional treatments may be effective in the many cancer patients who have difficulty taking drugs orally.^{4,5} Our patient had neuropathic pain, for which analgesic adjuvants are indicated, but he was unable to take drugs orally because of adverse reactions. Moreover, the pain was localized, making it well suited to treatment by nerve block. Regrettably, he did not undergo nerve block sooner because of poor communication between his primary physician and the pain clinician. Primary physicians must be better informed of the importance of consulting with the pain clinician to determine if and when their patients are indicated for nerve block.

The fentanyl buccal tablets the patient took as rescue therapy are an excellent option for reducing pain or relieving sudden pain and improving quality of life in patients with chronic pain, but abuse, dependence and other adverse events are a concern.^{6,7} Our patient required more frequent and higher doses of immediate-release opioid therapy despite receiving increasing doses of controlled-release therapy. He may have been taking them not merely for pain relief, but also to relieve mental anguish. Chemical coping, as this is called, is the first step towards abuse and dependence. Chemical coping is a serious issue associated with opioid analgesic treatment in Japan⁸ and must be remembered by physicians as they monitor their opioid-using patients. Although the acetaminophen we prescribed as rescue therapy to substitute for fentanyl buccal tablets appears to have been effective, this option must be carefully considered because of the risk of acute liver injury, as has been reported earlier.⁹

CONCLUSION

We used ganglion impar block to treat persistent postoperative painful micturition and perineal pain following surgery for anal fistula cancer with excellent results, leading to a significant decrease in the patient's opioid requirements. Specific nerve blocks may be used for the management of neuropathic pain and have a beneficial effect on opioid dose reduction.

Conflict of interest: None

Authors' contribution:

YM; Managed this patient and written this manuscript

MM; Managed this patient

KS; Conceived the idea of this case study, and participated in its design and coordination and helped to draft the manuscript

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