

controversial. Future research is warranted to establish a standardized parenteral opioid treatment for dyspnea in terminally ill cancer patients.

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## *The Combination of Superior Hypogastric Plexus Block and the Block of the Ganglion Impair in a Patient With Abdominal and Perineal Pain Poorly Responsive to Opioids*



Dear Editor,

More than 10 million people worldwide are diagnosed with cancer. About two-thirds of them will experience pain during the course of the disease.<sup>1</sup> The management of cancer pain requires an appropriate multidisciplinary approach involving consideration of the pain's physiopathology, analgesic pharmacology, and the patient's psychosocial concerns. Drug therapy with the use of opioids and adjuvants is successful in 70% to 90% of patients with varied types of cancer pain.<sup>2</sup> Standards for the management of cancer pain have been recently released.<sup>3</sup>

About 10% of patients with cancer pain do not have a good response to drug therapy. An interventional pain treatment may be indicated when drugs do not provide sufficient analgesia or when adverse effects become intolerable.<sup>4</sup> According to recent recommendations of the European Association for Palliative Care, the evidence supporting these procedures is weak for most neurolytic blocks.<sup>5–8</sup> However, in some specific conditions, an interventional approach may produce spectacular improvements

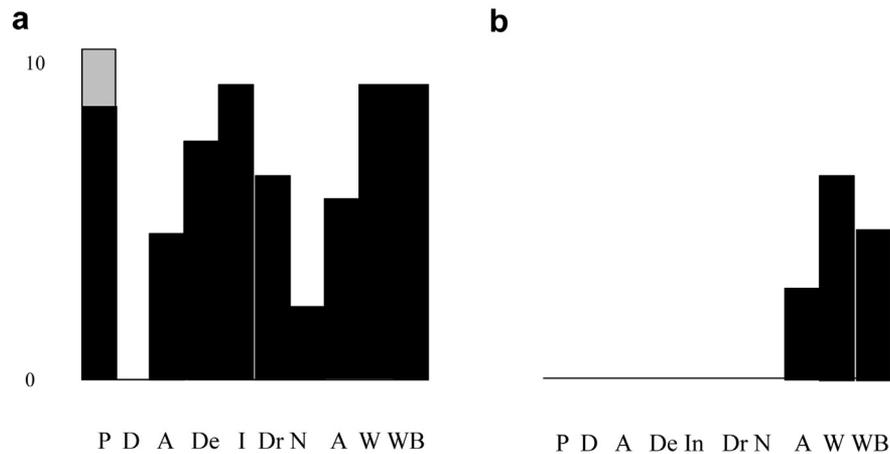


Fig. 1. a) ESAS before performing the blocks (see text); b) ESAS on the day after the blocks. P = pain; D = dyspnea; A = anxiety; De = depression; I = insomnia; D = drowsiness; N = nausea; A = appetite; W = weakness; WB = well-being; ESAS = Edmonton Symptom Assessment Scale. The gray area is the breakthrough pain intensity.

in analgesia. As the face of cancer pain management has changed in considerable ways, interventional procedures have become an integral part of providing multimodal analgesia for selected patients.<sup>4</sup> Neurolysis of retroperitoneal sympathetic ganglia, which are transit points for visceral afferents as well as sympathetic efferents, has minimal complications and is easy to perform. We report a patient who underwent complex opioid strategies unsuccessfully and then had clear clinical improvement using a combination of two sympathetic ganglia blocks—the superior hypogastric plexus block and the block of the ganglion impar.<sup>9</sup>

### Case Description

A 48-year-old woman with a history of ovarian cancer was admitted to the main regional center for pain relief and supportive care. She had undergone surgery and multiple courses of chemotherapy and a course of pelvic radiotherapy. She had additional interventions to remove pelvic lymph nodes after relapse and needed a ureteral stent. She provided consent for description of her case for scientific purposes.

The patient developed persistent abdominal pain in the right inferior quadrant and perineal pain. She had been treated with several opioid regimens and before admission was receiving transdermal fentanyl 3.6 mg/day (150 mcg/h), ibuprofen 800 mg/day, and subcutaneous morphine 10 mg as needed, administered four to six times a day for episodes of breakthrough pain. Her Karnofsky Performance Status score was 60 and she did not have cognitive disturbances, as assessed by Memorial Assessment Delirium scale (3/30). Pain intensity was 7/10 on a numerical 0–10 scale, with peaks of breakthrough

pain of 10/10 occurring four to six times a day. The principal symptoms indicated on the Edmonton Symptom Assessment Scale (ESAS) were insomnia (9/10), weakness (8/10), and poor well-being (9/10) (Fig. 1). Imaging studies showed a pelvic mass constituted principally by lymph nodes.

Fentanyl was switched to methadone in doses of 90 mg/day orally, divided into three doses, without reporting any clinical benefit. Pain oscillated between 8/10 and 10/10. Hydration and other supportive measures were provided. A ketamine burst of 100 mg/day and midazolam 30 mg/day for two days was uneventful and had no effect on the patient, who indicated the same intensity levels of ESAS items. A further increase in the methadone dose, intravenously, and the addition of tapentadol up to 300 mg/day and amitriptyline 30 mg/day did not improve her clinical condition.

Neurolysis of the superior hypogastric plexus and the ganglion impar was proposed to the patient as an alternative to improve her reported misery. The patient approved and provided written consent. After premedication and under light anesthesia with propofol, the patient was placed in prone position. Under fluoroscopy, a 22-gauge needle was inserted at 7 cm bilateral to the midline at level of L4-5 interspace, with the needle bevel directed to midline. The needle was advanced laterally to the body of the L5 vertebra until the needle tip was in the anterolateral space. Biplanar fluoroscopy was used to verify needle placement. The injection of contrast medium confirmed the accuracy of placement. Alcohol 75%, 6–8 mL, was injected bilaterally. With the patient in the same position, a needle, bent to form a 30° angle, was then advanced under fluoroscopic guidance in the midline over the anococcygeal ligament. It was directed anteriorly

toward the coccyx until its tip reached the sacrococcygeal junction. The injection of contrast medium under fluoroscopy showed the typical image resembling an apostrophe. Alcohol 75%, 5 mL, was injected. The patient was then transferred to the unit for strict observation, monitoring for the possibility that the methadone may require prompt tapering.

The day after pain intensity was 0/10, and most items of ESAS were clearly reduced. Methadone doses were progressively reduced to 45 mg/day orally. The patient was discharged with no pain and a low level of symptom distress (Fig. 1).

This case illustrates the use of neurolysis of the lower sympathetic ganglia to dramatically resolve a difficult case of pain that was poorly responsive to different types of opioid therapy, a burst of ketamine and midazolam, and other treatments used to desensitize patients receiving high doses of opioids unsuccessfully or for assisting opioid switching in some difficult cases of opioid-induced hyperalgesia.<sup>10</sup> Interruption of sympathetic structures, such as the superior hypogastric plexus and the ganglion impar, has been used for a variety of pelvic and perineal pains, respectively. These techniques lack evidence of efficacy in the literature<sup>8</sup> but can be individually chosen on the basis of specific clinical conditions. In our case, the patient complained of both lower abdominal pain and perineal pain. These areas are the main target for the two blocks used in this patient: The superior hypogastric plexus carries afferents from the viscera of the lower abdomen and pelvis and the ganglion impar innervates the perineum, distal rectum, anus, distal urethra, vulva, and distal third of the vagina. The neurolysis of these sympathetic structures provided excellent analgesia, allowed reduction of opioid doses, and reduced the intensity level of associated symptoms.

The combination of these two neurolytic techniques by using transdiscal and transsacrocoxygeal approaches has been described to be effective in a case series.<sup>11</sup> Although other approaches, such as opioid rotation, are usually considered when there is insufficient pain relief or substantial adverse effects, interventional approaches should be considered when systemic pharmacologic treatment and other noninvasive therapies fail. For our patient, it was possible to manage a very difficult pain situation by blocking the lower retroperitoneal sympathetic ganglia.

Complex pain syndromes refractory to conventional pharmacologic treatments require prompt, albeit judicious, delivery of unorthodox treatment options that may not be included in conventional guidelines and standard practices.<sup>4</sup> A stepwise and a meaningful approach to clinical problems may be helpful in the treatment of conditions otherwise considered

intractable and should be considered after appropriate trials of pharmacological treatments. Careful patient selection is mandatory when performing these techniques, rather than using them extensively.

A combined neurolytic superior hypogastric plexus block and ganglion impar block may be an effective treatment for reducing pain in individual cancer patients presenting with pelvic and/or perineal pain who are not responsive to intensive opioid treatment. These techniques are easy to perform under fluoroscopy guidance and have rare serious complications.

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## Response to: “Patients’ Autonomy at the End of Life: A Critical Review”



Dear Editor,

Dr. Houska et al. carried out a critical review about patients’ autonomy at the end of life<sup>1</sup> in which they compare their results to a previous systematic review conducted by our research group.<sup>2</sup> We appreciate the comments of Dr. Houska et al. regarding our review. As the authors highlight, our conclusions about the relationship between dignity and autonomy are similar to their autonomy model among patients at the end of life.

However, they state that our “description of autonomy as a determining factor of perceived dignity limited to the traditional understanding as the desire for having control over the dying process and the desire for self-determination.” We consider that two important aspects need to be clarified in relation to this statement:

1. In our review, we observed that only the patients “whose sense of dignity was based on values such as autonomy, the ability to control their circumstances, or quality of life found that their dignity was undermined.” And, only in this sense, did we state, “autonomy can be a determining factor of perceived dignity.” In no other sense or context, did we suggest that dignity can be understood as autonomy.
2. From the very beginning of our systematic review, we clearly define that “dignity is considered to be a fundamentally intrinsic feature of the human individual.” In the same way that all the qualitative studies focus on the perception of personal dignity<sup>3–5</sup> have underlined, the former is sensitive to the image that patients have of themselves (identity), to the relationship with others, and to their surroundings.

As Houska et al. also highlight, we acknowledge that dignity and autonomy are different and complex concepts. Putting the idea of self-determination above everything else is not always appropriate or beneficial in a palliative care context due to the vulnerable and dependent situation that these patients face.

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## Authors’ Response



Dear Editor,

We would like to thank you for the opportunity to respond to the issues raised in Dr. Rodríguez-Prat et al.’s letter concerning our critical review on patients’ autonomy at the end of life<sup>1</sup> and to offer an explanation of our comment to their systematic review.<sup>2</sup> We would also like to thank Dr. Rodríguez-Prat and her colleagues for their interest in our paper and for taking the time to express their concerns. In their letter to the editor, Dr. Rodríguez-Prat et al. argue that their results show autonomy as a determining factor of dignity only at one particular context and not in general and also highlighted their