Dear Editor,

Emerging trends indicate that terminal-stage diseased patients can consider advanced early interventional measures to manage pain and reduce the side effects of opioids.\(^1\) Interventional strategies for managing pelvic tumor-associated pain include subarachnoid neurolytic block, which produces effective analgesia but is associated with voiding symptoms.\(^2\) As percutaneous cervical cordotomy achieves effective contralateral analgesia below the clavicle by destroying the lateral spinothalamic tract, it is associated with the risk of transient weakness and dysesthesia (Fig. 1).\(^3\) Shared decision-making is a patient-centered clinical process. The goal is to allow medical staff and patients to share evidence-based medicine before making medical decisions, and to provide patients with all considerable options including combining their own preferences and values. Herein, we describe the case of a 74-year-old woman with terminal sarcoma accompanied by intractable pain. She was diagnosed with retroperitoneal leiomyosarcoma post-wide local excision at the National Taiwan University Hospital in 2010. Following subsequent local relapse (right pelvic sidewall), she underwent a nephrectomy and an iliac vein bypass tumor excision at our hospital in 2011. Patient suffered from local relapse involving the iliac vessel and bladder and underwent partial cystectomy in 2013. Following repeated surgeries for tumor recurrence and vascular repairs by general and cardiovascular surgeons during 2014–2017, chemotherapy and concurrent radiation therapy were initiated at the Department of Oncology in April 2018, as well as an anticoagulant administration for deep vein thrombosis. She had local nerve invasion in the right pelvic cavity (Fig. 2) and required more numbers of fentanyl patches (fentanyl 50 µg/hr × 16 patches) in combination with adjuvant oral medicine, which nevertheless, failed to relieve the pain. Suspecting poor prognosis, a lumbar subarachnoid neurolysis by alcohol and percutaneous fluoroscopy-guided cordotomy was suggested during our consultation in May 2018. However, the expertise and knowledge needed for these procedures was lacking among most oncologists. Primarily, a combined meeting was held with the oncology staff, nurses, and

Fig. 1. Schematic representation of a cross-section of the spinal cord at C2.

DRG: dorsal root ganglion; S: sacral origin of lateral spinothalamic tract; C: cervical origin of lateral spinothalamic tract.

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the pharmacist introducing the pain interventions, and the relevant information pertaining to the case were disseminated, from basic to clinical evidence. Additional options besides opioid analgesic regimens were explained to the patient’s family. However, her children did not consent to the procedure and therefore, the surgery was postponed twice. The patient initially refused consent, preferring to avoid the voiding and motor function side-effects, but eventually, consented due to debilitating pain. After extensive discussion and shared decision-making, a percutaneous cervical cordotomy was consensually adjudged to be the more precise and tolerable procedure as it was executable in the supine position as opposed to subarachnoid neurolytic blocks. Eventually, a percutaneous cervical cordotomy was performed on July 3, 2018, after the patient’s family provided consent. The entry point on the skin was above the C1–2 intervertebral foramen on the left side with continuous patient feedback of sensory experiences. A radiofrequency (RF) generator with a 22-gauge straight, sharp cannula with a 10-mm electrode tip was used, aided by neurophysiological confirmation via impedance measurement and stimulation, and confirmed functional response of the target. RF thermocoagulation was achieved with sequential lesions at rising temperatures from 50°C to 70°C for 60 s (Fig. 3). Within three days of the procedure, the pain resolved and the analgesic dosage was tapered from 480 mg of oral morphine equivalent per day to 180 mg per day. The fentanyl patches and oral morphine use tapered to zero within 1 month of the procedure, and only mild numbness was noted. Complication of post-dural-puncture headache and weakness in the left hand was noted for 3 days and 1 week, respectively. A follow-up was conducted 6 months post-RF ablation, and the patient showed appreciable sustenance of analgesia. All pain physicians aspire to relieve their patients’ pain at the earliest with an appropriate level of intervention. However, insufficient communication between the physicians and patients, coupled with a lack of trust has retarded the development of this treatment modality in Taiwan. In the present case, we invested considerable time to educate the oncology department staff about advanced pain interventions, and to create a connection between the two specialties by a combined meeting. We also let the patient and her family invest enough time in making the final decision. The pros and cons of the procedure, including its precise nature and the empathetic approach, were explained to the family with a pictorial illustration.

In the case presented herein, sufficient time and explanation were given to the patient and her family, with eventual achievement of discharge without analgesics, and the patient’s condition remained stable.
without any deterioration or tumor progression on subsequent follow-up, 8 months after the procedure. We believe that in addition to identifying specific symptoms and appropriate patient selection, an open approach of communication for shared decision-making can improve authenticity and ensure that patients receive utmost holistic care.

References


