**Patient history**

Believed to have less than six months to live, this 63-year-old female was wracked with pain as a result of lung cancer that had metastasized into her lymph nodes, vertebrae and the bones of her left shoulder. She was referred to us by her oncologist to provide end-stage pain relief.

**Case description**

The Visual Analog Scale scoring system was used to measure the patient's pain. It was assessed at 10 out of a possible 10. We learned that this severe pain was causing the patient to curtail her interactions with loved ones: in such agony was she that she could not endure even brief visits from family and friends (especially those who would bring along boisterous, noisy children).

Her oncologist attempted to manage the pain by prescribing methadone administered via fentanyl transdermal patch. However, even though the patient received relatively high doses of the drug – each patch delivering 215 mcg over 72 hours – zero pain relief was achieved. We determined that the primary source of pain for this patient was her shoulder. The decision was made with the concurrence of the patient and her referring physician to focus our pain management efforts in that region.

**Treatment plan**

First, the patient's medications were modified. We discontinued the fentanyl transdermal patches and replaced them with 30 mg of orally administered methadone, taken three times daily. We were confident that the methadone in pill form would be tolerated because the patient was experiencing neither nausea nor vomiting.

Second, we performed image-guided blockade injections of the suprascapular nerve and glenohumeral joint using a combination of bupivicaine and methylprednisolone acetate.

**Outcome**

The shoulder injections were ineffective. However, we had considerable success with the change in medications: The oral methadone was indeed tolerated and resulted in a reduction of the patient's VAS score to 5. Halving her pain intensity was sufficient to permit the patient to begin again enjoying family interaction.

Cancer ended her life four months later, but the patient experienced substantial pain relief right to the very last.

**Discussion**

The fentanyl transdermal patch did not help this patient because her body's ability to absorb the medication was less than optimal. The degraded absorption capacity was due to the chemotherapy and radiation treatments she had undergone. Moreover, those oncologic interventions inhibited normal physiological reaction to the transdermally delivered medication.

Our use of suprascapular nerve blocks to quell cancer pain represents a less common application of this intervention. Chiefly, it is performed in response to suprascapular nerve entrapment or injury of the sort that results from prolonged wearing of heavy backpacks or purses and from direct blows to the suprascapular nerve such as might occur during the playing of sports. Suprascapular nerve injury typically presents as a severe, deep pain that radiates from the top of the scapula to the ipsilateral shoulder.

Glenohumeral injections, meanwhile, are administered directly into the joint space and usually are intended for acute and chronic capsulitis, glenohumeral arthritis and synovitis.

Although we were unable to deliver complete pain relief to this very compromised and terminal patient, we did manage to provide significant comfort and an improved quality of life during her final days. Our contribution to the patient's end-stage care was compassionate, fruitful and well-worthwhile.