Corticosteroid Injections for Knee Pain at the End of Life

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Dear Editor:

Localized pain injections are commonly performed on cancer patients.¹ Intra-articular joint injections for end-of-life pain has not been reported previously. We present a case of a patient with untreatable progressive meningioma with severe bilateral knee pain at the end of life.

Our patient is a female in her early 60s who had failed multiple treatments for a left parasagittal meningioma. She suffered from spastic hemiplegia and medication-controlled seizures. She had significant bilateral knee pain that was attributed to osteoarthritis at a pain management appointment eight days prior to the knee injection. A bilateral knee corticosteroid injection was scheduled several weeks later.

She was seen in the neuro-oncology clinic three days prior to injection. It was decided that she would enroll in home hospice care. The patient withdrew from physical therapy (PT). We contacted her by phone that day and she stated that she would like to try the bilateral knee injections but that they were scheduled for several weeks later. We discussed that she needed the injections as soon as possible because she could be unable to receive these injections while under hospice care. Given the significant symptom burden, plans for eminent enrollment in hospice program, and because we could accommodate her sooner, we scheduled her for injection in the rehabilitation clinic three days later.

Intra-articular ultrasound guided corticosteroid injections to the bilateral knees were performed. The Edmonton

Symptom Assessment System (ESAS) was completed immediately before the injection. Immediately after the injection she noted a significant improvement in her knee pain. The patient was contacted by phone one week later. She had decided to postpone home hospice because she was feeling better. Follow-up ESAS scores were obtained over the phone. She also returned to PT to obtain a knee brace.

The pre-injection and follow-up ESAS scores are shown in Figure 1. The patient had a 56% reduction in her pain score and had improvements in well-being and sleep. The patient's knee pain no longer was a significant cause of pain for the remainder of her life. She did, however, take hydrocodone/acetaminophen as needed for pain mostly from other sources. Later her fatigue and neurologic decline progressed. She enrolled in hospice and died at six weeks and four months post-injection, respectively.

The shift to comfort care typically means the avoidance of localized injectable musculoskeletal agents partially due to limited reimbursement. By reducing her dependence on potentially mind-altering opiate medications during this meaningful time, we likely provided her with a better quality of life, as demonstrated by her decision to delay hospice.

This letter and a prior report by Fu et al.² suggest that there may be a role for localized injectable medications for end-of-life noncancer pain. Randomized controlled trials of injectable pain medications at end of life that analyze both quality of life and cost-effectiveness should be performed.

FIG. 1. Edmonton Symptom Assessment Scores on day of injection and 7 days post-injection.

Acknowledgment

This case was presented as a poster abstract at the Association of Academic Physiatrists 2015 Annual Meeting on March 13, 2015.

Author Disclosure Statement

We certify that no party having a direct interest in the results of the research supporting this article has or will confer a benefit on us or on any organization with which we are associated.

The research was supported in part by the M.D. Anderson Cancer Center support grant CA 016672. Eduardo Bruera is supported in part by National Institutes of Health grants RO1NRO10162-01A1, RO1CA122292-01, and RO1CA124481-01.

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