## Title
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## Journal
A&A Practice, 14(2)

## ISSN
2575-3126

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## Publication Date
2020-01-15

## DOI
10.1213/xaa.0000000000001149

Peer reviewed

# Letter Regarding "Repeated Intercostal Nerve Blocks With Liposomal Bupivacaine for Chronic Chest Pain: A Case Report"

## To the Editor

Visoiu and Verdecchia[1] reported the case of a woman suffering from chronic chest wall pain following a massive pulmonary embolus treated with intercostal nerve blocks. The patient initially received benefit when the blocks were performed using ropivacaine. Subsequently the blocks were performed using liposomal bupivacaine, which has a longer duration of action measured in days, not hours.

In contrast, cryoneurolysis—also approved for the treatment of acute and chronic pain—produces a reversible nerve block measured in weeks or months.[2] In cases of chronic pain that has responded to local anesthetic-based nerve blocks, ultrasound-guided percutaneous cryoneurolysis offers the benefits of a dramatically longer duration of analgesia, and, in the described case, possibly a decreased number of instrumentations. Because the risk of pneumothorax has been reported as high as 1%–2% for each intercostal block performed,[3] utilizing cryoneurolysis as an alternative to local anesthetic-based intercostal blocks may decrease the incidence of pneumothorax as well.

After 50 years of use, the published literature suggests a level of safety for cryoneurolysis exceeding local anesthetic-based peripheral nerve blocks. There is no risk of local anesthetic toxicity, the risk of infection appears similar—if not lower—than for single-injection peripheral blocks, and no permanent neurologic injury has been reported.[2] Two investigations reported a slight increase in the incidence of neuropathic pain for cryoneurolysis administered via the surgical incision following open thoracotomy, but the overwhelming majority of randomized, controlled trials of cryoneurolysis via the surgical incision have not reported any similar increased risk.[4]

Many questions remain regarding the use of ultrasound-guided percutaneous cryoneurolysis for the treatment of acute and chronic pain. Nonetheless, due to its potential for providing long-term analgesia far surpassing local anesthetic-based peripheral nerve blocks—including liposomal bupivacaine—we propose that cryoanalgesia is at least worth considering in similar clinical situations.

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DOI: 10.1213/XAA.0000000000001149

Funding: J.J.F.'s institution has received funding and/or product for his research from Ferrosan Medical Devices, Myoscience, Epimed, and SPR Therapeutics. B.M.I.'s institution has received funding and/or product for his research from Ferrosan Medical Devices, Myoscience, Epimed, SPR Therapeutics, and Heron Therapeutics. He performed consulting work for Pacira Pharmaceuticals more than 3 years go (last: November 2014).