OJAnes> Vol.2 No.5, November 2012

OPEN ACCESS

Ultrasound-Guided Peri-Lymphatic and Peri-Neural Corticosteroid Injection as an Adjuvant to Pain and Lymphedema Management in Terminal Cancer: Two Case Reports

PDF (Size:113KB) PP. 230-233 DOI: 10.4236/ojanes.2012.25054

Author(s)

Clark K. Choi, David I. Rosenblum

ABSTRACT

We are reporting two patients presented with intractable cancer pain that was treated with a novel application of an ultrasound-guided peripheral nerve block using corticosteroid. This technique offered relief to both patients whom otherwise their cancer pain was difficult to manage. The first patient developed lymphedema to the right axilla from metastatic squamous cell carcinoma. After multiple injections were deposited around the brachial plexus, lymphedema on the right axilla decreased slightly in size; however, range of motion improved post-procedure prior to his discharge one week later. In the second patient with left inguinal lymphadenopathy from metastatic left ureteral transitional cell carcinoma, there was a dramatic reduction in lymphedema in the left groin and leg as well as a considerable decrease in pain score during a two week follow-up after the peri-neural and peri-lymphatic femoral block. A 75% improvement in patient satisfaction was reported in the office visit's questionnaire form. Corticosteroids can be used as an adjuvant to peripheral nerve block to decrease the pain secondary to lymphedema caused by the inflammatory response from metastatic cancer. This application can provide an alternative way to manage severe cancer-related pain caused by lymphedema in both upper and lower limbs.

KEYWORDS

Corticosteroids; Adjuvant; Cancer Pain; Lymphedema; Peripheral Nerve Block

Cite this paper

C. Choi and D. Rosenblum, "Ultrasound-Guided Peri-Lymphatic and Peri-Neural Corticosteroid Injection as an Adjuvant to Pain and Lymphedema Management in Terminal Cancer: Two Case Reports," *Open Journal of Anesthesiology*, Vol. 2 No. 5, 2012, pp. 230-233. doi: 10.4236/ojanes.2012.25054.

References

[1] J. Mobaleghi, F. Allahdini, K. Nasseri, B. Ahsan, S. Shami, M. Faizi and F. Gharibi, "Comparing the Effects of Epidural Methylprednisolone Acetate Injected in Patients with Pain Due to Lumbar Spinal Stenosis or Herniated Disks: A Prospective Study," International Journal of General Medicine, Vol. 4, 2011, pp. 875-878.

[2] C. Roy, N. Chatterjee, S. N. Patro, A. Chakraborty, G. R. V. Kumar and R. Sengupta, "The Efficacy of Transforaminal Epidural Steroid Injections in Lumbosacral Radiculopathy," Neurology India, Vol. 59, No. 5, 2011, pp. 685-689. doi:10.4103/0028-3886.86541

[3] A. Venancio Rde, F. G. Alencar and C. Zamperini, "Different Substances and Dry-Needling Injections in Patients with Myofascial Pain and Headaches," Cranio, Vol. 26, No. 2, 2008, pp. 96-103.

[4] A. Johansson, J. Hao and B. Sjolund, "Local Corticoster-oid Applications Blocks Transmission in Normal No-ciceptive C-Fibres," Acta Anaesthesiologica Scandinavica, Vol. 34, No. 5, 1990, pp. 335-338. doi:10.1111/j.1399-6576.1990.tb03097.x

[5] A. Movafegh, M. Razazian, F. Hajimaohamadi and A. Meysamie, "Dexamethasone Added to Lidocaine Prolongs Axillary Brachial Plexus Blockade," Anesthesia & Analgesia, Vol. 102, No. 1, 2006, pp. 263-267. doi:10.1213/01.ane.0000189055.06729.0a

OJAnes Subscription
Most popular papers in OJAnes
About OJAnes News
Frequently Asked Questions
Recommend to Peers
Recommend to Library
Contact Us

[6] T. Stan, E. J. Goodman, C. Bravo-Fernandez and C. R. Holbrook, "Adding Methylprednisolone to Local Anesthetic Increases the Duration of Axillary Block," Regional Anesthesia and Pain Medicine, Vol. 29, No. 4, 2004, pp. 380-381.

[7] R. S. Cicala, R. Turner, E. Moran, R. Henley, R. Wong and J. Evans, "Methylprednisolone Acetate Does Not Cause Inflammatory Changes in the Epidural Space," Anesthesiology, Vol. 72, No. 3, 1990, pp. 556-558. doi:10.1097/00000542-199003000-00026

[8] S. E. Mackinnon, A. R. Hudson, F. Gentili, D. G. Kline and D. Hunter, "Peripheral Nerve Injection Injury with Steroid Agents," Plastic and Reconstructive Surgery, Vol. 69, No. 3, 1982, pp. 482-490. doi:10.1097/00006534-198203000-00014

[9] A. T. Esch, A. Esch, J. L. Knorr and A. P. Boezaart, "Long-Term Ambulatory Continuous Nerve Blocks for Terminally Ill Patients: A Case Series," Pain Medicine, Vol. 11, No. 8, 2010, pp. 1299-1302. doi:10.1111/j.1526-4637.2010.00900.x

[10] B. Ben-David and S. Stahl, "Axillary Block Complicated by Hematoma and Radial Nerve Injury," Regional Anesthesia and Pain Medicine, Vol. 24, No. 3, 1999, pp. 264-266. doi:10.1097/00115550-199924030-00016

[11] L. H. Ferraro, M. A. Tardelli, A. M. Yamashita, J. D. Cardone and J. M. Kishi, "Ultrasound-Guided Femoral and Sciatic Nerve Blocks in an Anticoagulated Patient. Case Reports," Revista Brasileira de Anestesiologia, Vol. 60, No. 4, 2010, pp. 422-428.

[12] H. B. Fischer, T. M. Peters, I. M. Fleming and T. A. Else, "Peripheral Nerve Catheterization in the Management of Terminal Cancer Pain," Regional Anesthesia, Vol. 21, No. 5, 1996, pp. 482-485.

[13] B. A. Williams, B. B. Murinson, B. R. Grable and S. L. Orebaugh, "Future Considerations for Pharmacologic Adjuvants in Single-Injection Peripheral Nerve Blocks for Patients with Diabetes Mellitus," Regional Anesthesia and Pain Medicine, Vol. 34, No. 5, 2009, pp. 445-457. doi:10.1097/AAP.0b013e3181ac9e42