

Continuous Erector Spinae Plane Block for unresponsive lactating breast pain: a case series.

Enrica Delfino¹, Lorella Faraoni², Roberta Netto¹, Micaela Notarangelo³

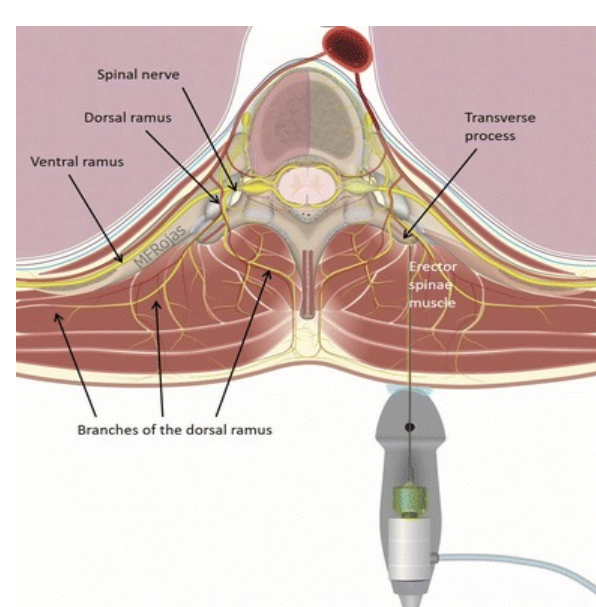
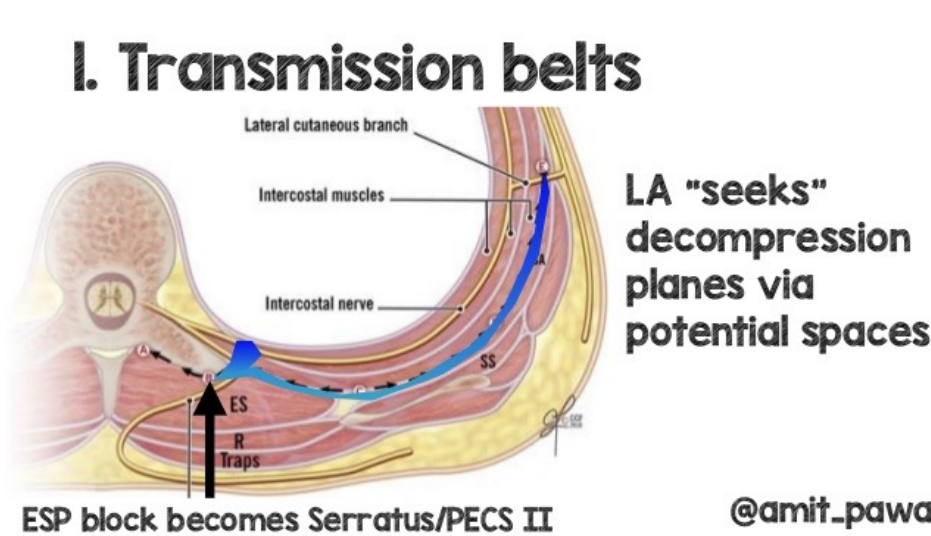
¹Department of Anesthesia, Intensive Care, and Out-Hospital Emergency, Ospedale Regionale della Valle d'Aosta, Aosta, Valle d'Aosta, Italy

²Poison Control and Toxicology Center, ASST Papa Giovanni XXIII, Bergamo, Italy.

³IBCLC, Private Practice, Lerici, Italy

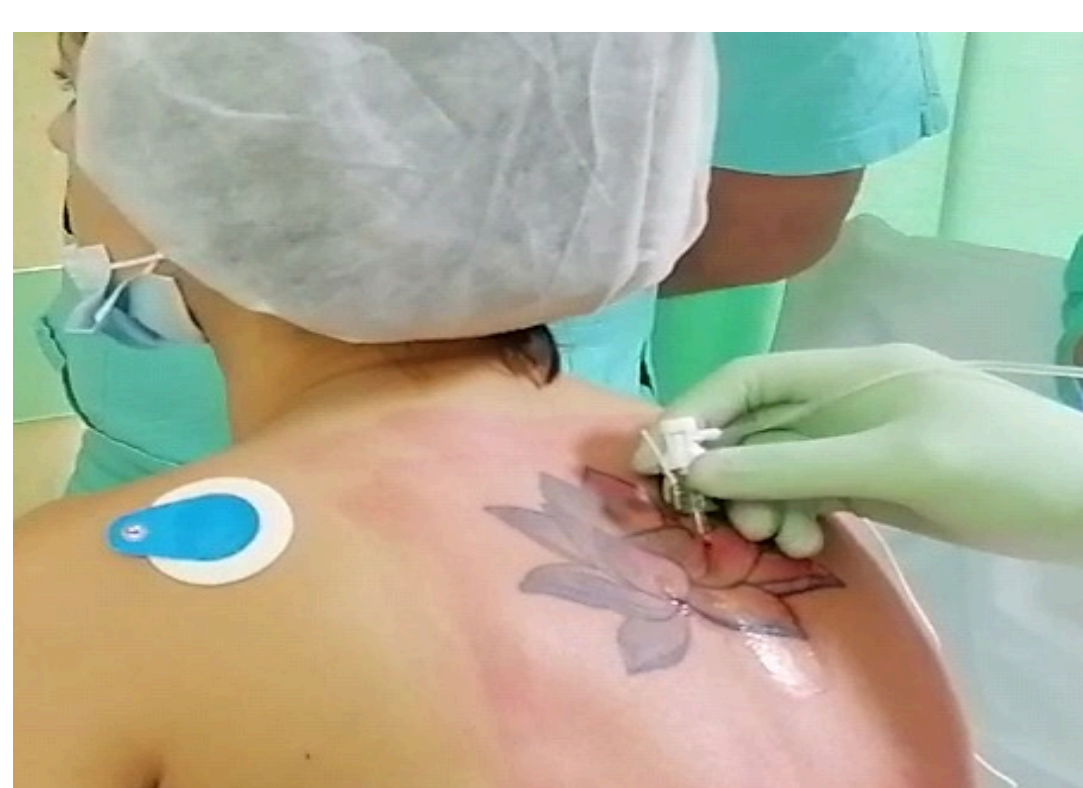
Background

Lactating breast pain, when persistent and unresponsive to traditional conservative therapy, normally results in early weaning, which has negative impacts on both maternal and child health. It has been suggested its neuropathic origin and a new therapeutic approach involving local anesthesia.



Method

We propose a case series, describing our experience in treating seven women whose lactating breast pain was persistent despite conservative therapy. Pain was evaluated using a 10-items neuropathic pain diagnostic questionnaire (DN4): in all cases, a score >4/10 suggested a diagnosis of neuropathic pain. We then performed an Erector Spinae Plane (ESP) Block on the sore side, by injections of 20 ml of levobupivacaine 0,25% 20 ml; intrafascial catheters were inserted and a second administration of 20 ml of levobupivacaine 0,25% after 24 hours, when catheters were removed. The procedure was performed under complete monitoring of vital signs, women were allowed to come back home after 30 minutes-observation after each administration and breastfeeding was never stopped.



Results

No adverse events were registered. Four infants required further interventions to correct latch (such as osteopathic treatment). All women resolved their pain and exclusively breastfed their infant for six months.

Conclusion

Based on our experience, ESP block seems to be a valid therapeutic alternative to resolve pain and support exclusive breastfeeding. Further studies are needed to identify common features and risk factors for developing neuropathic pain in breastfeeding. Sometimes lactating breast pain persists despite conservative therapy and leads to breastfeeding interruption. We describe our experience in treating persistent lactating breast pain with locoregional anesthesia. No adverse effects were observed. All mothers resolved pain. Exclusive breastfeeding was never stopped, lasting up to six months.

Amir LH, Demnerstein L, Garland SM, Fisher J, Farish SJ. Psychological aspects of nipple pain in lactating women. *J Psychosom Obstet Gynaecol.* 1996 Mar;17(1):53-8. doi: 0.3109/01674829609025664. PMID: 8860887.

McClellan HL, Hepworth AR, Garbin CP, Rowan MK, Deacon J, Hartmann PE, Geddes DT. Nipple pain during breastfeeding with or without visible trauma. *J Hum Lact.* 2012 Nov;28(4):511-21. doi: 10.1177/0890334412444464. Epub 2012 Jun 11. PMID: 22689707

Kissin I. Preemptive Analgesia. *Anesthesiology* 2000; 93:1138-43

Kissin I, Lee SS, Bradley EL Jr. Effect of prolonged nerve block on inflammatory hyperalgesia in rats: Prevention of late hyperalgesia. *ANESTHESIOLOGY* 1998; 88:224-32

Corresponding address: lfaraoni@asst-pg23.it

 Ospedale di Bergamo

Sistema Socio Sanitario

 Regione Lombardia

ASST Papa Giovanni XXIII