hiccup after lumbar epidural steroid injection" published in this journal.<sup>[1]</sup> They describe a case of a 61-year-old male who developed persistent hiccups lasting 3 days following lumbar epidural injection of triamcinolone and bupivacaine for treatment of low back pain. However, no treatment was prescribed for the management of hiccups.

Hiccups are a common and usually a self-limiting phenomenon. Hiccups occurring intraoperatively can be annoying and may disturb the surgical or diagnostic procedure because of sudden abdominal movements. We describe a case of a patient who developed hiccups intraoperatively that responded to administration of intravenous promethazine.

A 23-year-old male was scheduled for corrective repair of proximal hypospadius. Past history, physical examination and blood investigations were unremarkable. In the operating room, standard monitoring was instituted and intravenous access was secured. Spinal anesthesia was administered with 2.5 mL bupivacaine 0.5% at lumbar 3-4 interspace. Seven minutes following initiation of spinal anesthesia the patient developed hiccups. After waiting 5 min to allow for spontaneous cessation of hiccups, bilateral acupressure was applied at crus helicis for 2 min with no beneficial response. The patient denied history of recurrent hiccups in the past. He was asked to think of any persons who might be remembering him. Other than bringing a smile on his lips, this non-pharmacologic intervention failed to stop the hiccups. As the hiccups (since 20 min) were interfering with the surgery, we administered promethazine 12.5 mg IV. Within 3 min, the hiccups stopped. The surgical procedure was accomplished successfully with no recurrence of hiccups.

Persistent hiccups may cause significant complications such as discomfort, dehydration, exhaustion, insomnia, delirium, cardiac dysrhythmia, electrocardiogram artefacts, wound dehiscence, anxiety and depression.<sup>[2]</sup> Treatment strategies for intraoperative hiccups remain empirical.<sup>[3]</sup> Stimulation of the pharynx (opposite the body of second cervical vertebra) through the nose is a useful method for managing hiccups.<sup>[4]</sup> Compression of the eye balls and instillation of 5 mL ice-cold water through a nostril have also been suggested.<sup>[3]</sup> A popular intervention that is feasible in awake patients is to think of someone dear remembering us.<sup>[5]</sup>

Various drugs such as ketamine 25 mg IV, ephedrine 5 mg IV, atropine 0.5 mg IV and dexmedetomidine 50 µg IV over 10 min have been used to manage intraoperative hiccups.<sup>[3]</sup> Acupressure point recommended for treatment of hiccups is the diaphragm point (crus helicis), which was ineffective in this case. Chlorpromazine is often effective in

## Management of intraoperative hiccups with intravenous promethazine

Sir, We read with interest the article by Dr. Beyaz titled "persistent doses that are sedative.<sup>[6]</sup> We used promethazine 12.5 mg IV, another phenothiazine that successfully abolished hiccups. In an informal survey of anesthetic and surgical colleagues, majority cited promethazine as an option for the treatment of hiccups. Surprisingly, a literature search did not reveal any previous report of promethazine as a treatment choice for hiccups.

## Smita Prakash, N Sitalakshmi

Department of Anesthesia and Intensive Care, Vardhman Mahavir Medical College and Safdarjang Hospital, New Delhi, India

> Address for correspondence: Dr. Smita Prakash, C 17, HUDCO Place, New Delhi - 110 049, India. E-mail: drsunilprakash@gmail.com

## References

- 1. Beyaz SG. Persistent hiccup after lumbar epidural steroid injection. J Anaesthesiol Clin Pharmacol 2012;28:418-9.
- Lewis JH. Hiccups: Causes and cures. J Clin Gastroenterol 1985;7:539-52.
- Kranke P, Eberhart LH, Morin AM, Cracknell J, Greim CA, Roewer N. Treatment of hiccup during general anaesthesia or sedation: A qualitative systematic review. Eur J Anaesthesiol 2003;19:1-6.
- Salem MR, Baraka A, Rattenborg CC, Holaday DA. Treatment of hiccups by pharyngeal stimulation in anesthetized and conscious subjects. JAMA 1967;202:126-30.
- 5. Bhargava RP, Datta S, Badgaiya R. A simple technique to stop hiccups. Indian J Physiol Pharmacol 1985;29:57-8.
- Williamson BW, MacIntyre IM. Management of intractable hiccup. Br Med J 1977;2:501-3.

Access this article online	
Quick Response Code:	
	Website: www.joacp.org
	<b>DOI:</b> 10.4103/0970-9185.119131

. 17 11 11 . 1 . . 1 1.