

Correspondence

Horner's syndrome due to epidural analgesia

To the Editor:

Horner's syndrome is an unusual¹ but recognized complication of epidural anesthesia.^{2,3} We report a case of Horner's syndrome occurring during post operative epidural analgesia in a non-pregnant woman.

A 21-yr-old, 80 kg, ASAII, woman with Crohn's disease had an elective ileocaecal resection. A 20-gauge epidural catheter was placed at the T₆₋₇ level and 3 ml bupivacaine 0.5% with epinephrine were administered. General anaesthesia was induced with sufentanil and propofol, and was maintained with N₂O/O₂ and and isoflurane. Another 2 ml bupivacaine 0.5% with epinephrine and 2 mg preservative-free morphine were given during surgery. On arrival in the PACU, 3 ml lidocaine 1.5% µg·ml⁻¹ fentanyl solution was started at a rate of 8 ml·hr⁻¹.

Twenty hours after the infusion was started, she complained of "heaviness of the right eye lid and swelling of the right eye". Examination revealed right ptosis, miosis and conjunctival injection.⁴ A diagnosis of right Horner's syndrome was made. The sensory block was T₄₋₁₀. Bupivacaine was stopped and replaced by hydromorphone (0.05 mg·ml⁻¹) at 3 ml·hr⁻¹. Horner's syndrome resolved in 30 min. One hour and 45 min later, she complained of pain at rest. Bupivacaine/fentanyl was re-introduced at 8 ml·hr⁻¹. Hydromorphone was stopped 45 min later and the right side ptosis and miosis reappeared. Examination revealed no sensory block. The bupivacaine/fentanyl infusion was again discontinued and the Horner's syndrome resolved in two hours. Satisfactory analgesia was achieved with IV-PCA using morphine, and NSAID *po/pr*.

Kathy Fan MD, Ian Morris MD FRCPC,
Gordon Launcelott MD FRCPC
Halifax, Nova Scotia

REFERENCES

- 1 Mohan J, Potter JM. Pupillary constriction and ptosis following caudal epidural analgesia. *Anaesthesia* 1975; 30: 769-73.
- 2 Skaredoff MN, Datta S. Horner's syndrome during epidural anaesthesia for elective Caesarean section. *Can Anesth Soc J* 1981; 28: 82-5.
- 3 Clayton KC. The incidence of Horner's syndrome dur-

ing lumbar extradural for elective Caesarean section and provision of analgesia labour. *Anaesthesia* 1983; 38: 583-5.

- 4 Schachner SM, Reynolds AC. Horner syndrome during lumbar epidural analgesia for obstetrics. *Obstet Gynecol* 1982; 59: S31-2.

Epidural analgesia for labour

To the Editor:

In the Abstract for the article "Epidural analgesia for labour and delivery: informed consent issues", the authors stated that "the level of satisfaction with the consent process was 8.1/10". In the article, the authors reported that patients with side effects and patients without side effects had satisfaction levels of 3.1/10 and 7.1/10, respectively. We failed to see how combining the two groups would produce a higher level of satisfaction than the individual groups. Was one of the numbers misprinted?

B.Y. Ong MD FRCPC
R. Segstro MD FRCPC
D. Paetkau MD FRCPC
Winnipeg, Manitoba

REFERENCE

- 1 Pattee C, Ballantyne M, Milne B. Epidural analgesia for labour and delivery: informed consent issues. *Can J Anaesth* 1997; 44: 918-23.

REPLY:

You questioned the differences in means that relate to the patients' level of satisfaction with the consent process upon receiving the epidural. You noted that the mean level of overall satisfaction with the consent process, as stated in the abstract, was 8.1 which was calculated from question #57. You asked how this mean of 8.1 could be true if the mean level of satisfaction of the side effect and no side effect groups are 3.1 and 7.1 respectively.

This occurs because the data used to calculate the two group means, when we compared the side effect group and the no side effect group, came from a DIFFERENT question in the survey, #35, that asked the patient how satisfied they were with the information they received (ie.

the consent process) with regard to the SIDE EFFECTS OF THE LOCAL. As means of different measures, there is no relationship between them.

For the latter question, the entire sample mean was 6.8 and the standard deviation was 4.18 with an $n = 60$. The side-effect group of $n = 18$ had a mean of 3.1 ± 4.14 . The no side-effect group of $n = 48$ had a mean of 7.1 ± 4.16 .

I hope this gives a clearer picture of the results. In retrospect, we recognize that we should have reiterated and fully explained the overall mean level of satisfaction of 8.1 in the results section as this truly was the crucial result of the study.

Margaret Ballantyne
 Brian Milne MD MSC FRCPC
 Carol Pattee MD FRCPC
 Kingston, Ontario

Tuohy needles and CSE

To the Editor:

All 8.9 cm (3.5 inches) Tuohy needles are not equal in length. Combined spinal-epidural anaesthesia is now part of our everyday practice. Cerebrospinal fluid (CSF) is usually easily obtained, provided a special 11.90 cm (4 11/16 inches, Becton-Dickenson, Franklin Lakes, NJ, USA) spinal needle is inserted through the 8.9 cm Tuohy needle. We recently encountered a situation forcing us to replace our usual epidural tray (Baxter, Deerfield, IL, USA) with material manufactured by Preferred Medical Products (Thorold, Ontario, Canada). We then experienced difficulties obtaining free flow of CSF with this new material. Although the length of the shaft of the needles is the same for both

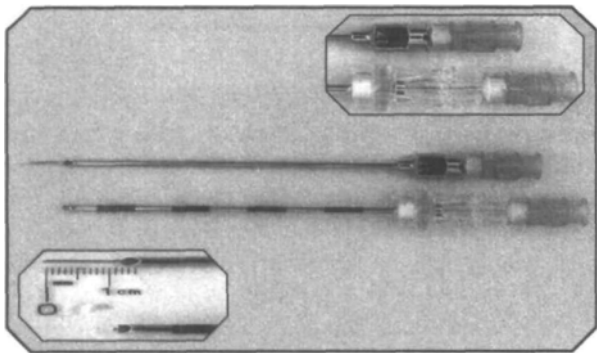


FIGURE: Top - Baxter Tuohy needle; bottom - PMP needle. A Becton-Dickenson 11.90 cm Whitacre #27 needle is inserted in both.

manufacturers, the length of the hub is longer in the second needle, providing only one mm protrusion of the spinal needle at the end of the Tuohy needle, while with the first epidural kit, needle protrusion is approximately 1.2 cm (Figure). The problem disappeared when the first epidural kit became available again.

Michel Girard MD MHPE FRCPC
 Pierre Drolet MD FRCPC
 Montréal, Québec

Fibreoptic cart for intubation and teaching

To the Editor:

The efficiency of fibreoptic intubation and teaching depend heavily on all necessary equipment and intubation aids being immediately available.¹ For this reason we have compiled a special fibreoptic intubation cart to make sure all needed equipment is readily at hand (Figure).

The fibreoptic intubation cart can also be used for the training and teaching of all staff and trainees in fibreoptic intubation techniques. Use of the cart for both routine clinical practice and for teaching offers obvious economic advantages. Especially the video-recorder enables us to use this cart for instruction purposes. All airway management equipment used in our hospital is available on the cart and is listed in the Table.

The cart is used for both predicted and unexpected difficult intubations. The cart has a fixed location in the operating theatre complex, where it is returned after use. The fibreoptic bronchoscope is cleaned and disinfected after use during which time we have a second bronchoscope available.

Chris Mallios MD
 Marcel de Quelerij MD
 Patricia Gerritsen MD
 Georgio Medici MD
 Frans V. Poorten MD
 Erasmus University Rotterdam-Dijkzigt
 Rotterdam, the Netherlands

REFERENCES

- 1 Benumof JL. Airway Management Principles and Practice. Mosby Year Book, 1996: 289, Fig 16-4.
- 2 Mallios C. A modification of the Laerdal anaesthesia mask for nasotracheal intubation with the fibreoptic laryngoscope. *Anaesthesia* 1980; 35: 599-600.