level increased only modestly following the anesthetic. We attribute this to the young age of the patient, prompt treatment, and the rapid resolution of symptoms following institution of therapy. It is possible that older infants and adults exhibit more marked elevations in serum CPK due to their relative increased muscle mass. Also noteworthy, was the self-limited fever and tachycardia following her initial anesthetic. Unexplained fever and tachycardia after general anesthesia, in patients as young as six months of age should be considered possible precursors to malignant hyperthermia.

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## *Nerve stimulator guided pudendal nerve blocks*

To the Editor:
We read with great interest Naja *et al.*'s recent article[1] regarding pudendal block with nerve stimulator guidance, and offer the following comments. This is the first randomized study demonstrating the efficacy of such blocks in providing postoperative analgesia following hemorroidectomy.

However, we are surprised by the landmarks proposed by the authors. Why did they use two injection points side by side?

We usually use this block for gynecological surgery (bartholin cyst removal and perineal surgery) and we use only one injection point at the intersection of a horizontal line running with the medial edge of the ischial tuberosity from the superior aspect of the anus.[2] In our experience, the mean depth of stimulation is 45.1 ± 11.6 mm (25–80) and the mean stimulation intensity is 0.6 ± 0.1 mA (0.5–1).

Motor responses are :

- contraction of the external anal sphincter (lower rectal response) and contraction of the vulva constrictor muscle (perineal response) in 52%;
- contraction of the external anal sphincter alone in 27%;
- contraction of the vulva constrictor muscle alone in 11%;
- contraction of the external anal sphincter, contraction of the vulva constrictor muscle and movement of the clitoris in 8%;
- No motor response in 2%.

In our opinion, the risk of the posterior injection points is an extension of the block to the sciatic nerve. This risk must be considered with a bilateral injection in ambulatory patients.

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### References

1 *Naja Z, Ziade MF, Lönnqvist PA.* Nerve stimulator guided pudendal nerve block decreases posthemorrhoidectomy pain. Can J Anesth 2005; 52: 62–8.
2 *Bolandard F.* Pudendal nerve block with nerve stimulation. *In*: Gaertner E, Al Nasser B, Choquet O, *et al.* (Eds). Regional Anaesthesia: Truncular and Plexus Anaesthesia in Adults. Arnette; 2004: 213–7.

### *Reply:*

*Thank you for the opportunity to respond to this letter. I was pleased to learn that pudendal nerve blocks are used for gynecological surgeries. We currently use our modified pudendal nerve block for patients undergoing hemorrhoidectomy.[1] Even with the local anesthetic mixture we were injecting at each point, we did not observe any postoperative ambulatory complication that might have been due to the sciatic blockade secondary to extension of local anesthetic mixture, as a potential risk identified by Dr. Bolandard.*

*Depending upon the topographical anatomy, one can select any pudendal nerve branch along its trajectory of specific inferior rectal nerves, confirmed by the observation of corresponding motor responses.*

*With the purpose of identifying an appropriate stimulation level of the pudendal nerve and its inferior rectal nerve and perineal branches as manifest by ipsilateral contraction of the posterior aspect of the anal sphincter, we had to decide on the posterior injection points. The selection of the anterior injection points was based upon the observation of the more anterior aspects of the ipsilateral anal sphincter, and also of the superficial transversalis perineal muscle, in order to maximize the anesthetized area for surgery. Our randomized study demonstrated the effectiveness of a modified pudendal block based upon a better understanding of the topographical anatomy of this area, in reducing postoperative pain among hemorrhoidectomy patients. The use of the selected double injection points side by side proved*

*efficacious in managing post hemorrhoidectomy pain, which can be quite severe.*

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**Reference**

1 *Naja Z, Ziade MF, Lonnqvist PA.* Nerve stimulator guided pudendal nerve block decreases posthemorrhoidectomy pain. Can J Anesth 2005; 52: 62–8.

## *3.5-Volt laryngoscope charger problem*

To the Editor:
In an effort to improve the quality of light available to anesthesia staff at the time of intubation, our institution converted from the 2.5-volt battery powered fibreoptic bronchoscopy laryngoscope handles, to the 3.5-volt rechargeable handles. The chargers are placed on every anesthetic machine at our hospital. The 3.5-volt handles are kept in the chargers between intubations. We were alerted to this equipment related issue early in the implementation of the Heine® (Herrsching, Germany) 3.5 volt laryngoscope handles and chargers.

A new battery pack, fully charged, will last for several months, before it needs recharging, during regular use in the anesthesia setting. We were surprised when two separate handles were completely drained of power, having been in the charger for several hours.

The power light on the charger was on (Figure, arrow C) but the batteries were not charging. Upon closer inspection we noticed the metal contact phalange had become dislodged at the top and had fallen down over (but not touching) the primary electrical power contact indicated in the Figure by arrow A. The proper positioning of the phalange is shown in the Figure by arrow B. When the laryngoscope handle was placed in the charger, rather than seating on the primary electrical power contact, the laryngoscope handle depressed the phalange (but would not properly seat on the primary power contact), which completed the low voltage circuit, and the green light came on (Figure, arrow C). This gave the appearance of proper function without charging the handle. The handle would eventually drain of power and not light. This incident demonstrates a single fault condition that led to device failure.

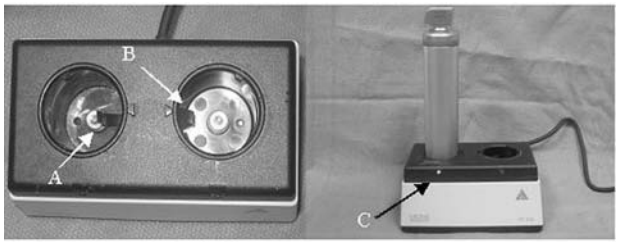


FIGURE Heine 3.5 volt laryngoscope charger from above and side view.

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## *"Ventilator bellow standstill"*

To the Editor:
Ascending (standing) bellows of anesthesia ventilators ascend during the expiratory phase, and descend during inspiration. Bellow displacement comes to a halt in the bottom position in the event of a circuit disconnection.[1] We are reporting an observation of ventilator bellow standstill without a circuit disconnection.

The case involved a 78-yr-old lady undergoing carotid endarterectomy. Intravenous induction and maintenance with inhalational agents were uneventful. Volume controlled ventilation was provided by Datex-Ohmeda S/5™ anesthesia delivery unit (ADU; Datex-Ohmeda Division Instrumentation Corp., Helsinki, Finland).[2] The setting was tidal volume 500 mL, respiration rate 8, I:E ratio 1:2. At emergence, inhalational vapor and $N_2O$ were turned off, and the fresh gas flow was turned to 13 $L \cdot min^{-1}$. At that point, the anesthesiologist incidentally noted that the ventilator bellow was at a standstill in the top position, with no respiratory movement. The first thought was a circuit disconnection, and help was called. No circuit disconnection was detected and the set ventilator rate of 8 had not been altered. Capnography indicated a normal $CO_2$ waveform and end-tidal $CO_2$ of 36 cm $H_2O$. The patient's other vital signs were stable. The fresh gas flow rate was subsequently reduced to 8 $L \cdot min^{-1}$ and the ventilator bellow movement returned.

This phenomenon can be explained by tidal volume compensation utilized in the Datex-Ohmeda S/5™ ADU. In traditional ventilators, the delivered tidal volume is the sum of the volume delivered from the ventilator and from the fresh gas flow over the inspiratory time. This may result in higher tidal volume delivered than desired, and may potentially cause