Correspondence

Monitoring de l'anesthésie: une augmentation du BIS inattendue

Mesurer la profondeur de l'anesthésie a toujours été une énigme depuis que les hypnotiques sont utilisés. Le manque de spécificité des signes cliniques a motivé la recherche d'autres moyens notamment neurophysiologiques dont l'électroencéphalogramme (EEG) a été le plus largement utilisé.¹ L'analyse bispectrale (BIS) est une valeur dérivée de l'EEG et semble un outil fiable pour prédire le niveau de sédation, la perte de conscience² ou la profondeur de l'anesthésie.³

Nous décrivons le cas d'un patient de 64 ans, sans antécédent, proposé pour une chirurgie réglée d'une névralgie faciale invalidante par la technique de Gardner. L'anesthésie générale a été réalisée par l'association propofol (concentration cible: $3 \mu\text{g}\cdot\text{mL}^{-1}$), rémifentanyl ($0.25 \mu\text{g}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$). Le BIS (A-1000 Aspect® Medical Systems, Natick, MA) parfaitement stable autour de 40% a brutalement présenté 3 pics (un à 75% et deux à 95%) sensés correspondre à un état d'éveil (Figure). Le patient, non curarisé, n'a présenté ni mouvement ni variation hémodynamique. Il n'y a pas eu d'allègement de l'anesthésie intraveineuse à objectif de concentration. Les quantités de propofol et de rémifentanyl étaient conformes à ce qui étaient attendues. Cette augmentation du BIS correspond à des tractions sur le nerf trijumeau. Il est probable que la proximité du noyau du V et de la substance réticulée activatrice ascendante (SRAA) puisse expliquer ces épisodes d'« éveil ». Il pourrait donc s'agir d'un « éveil » cortical par stimulation directe, mécanique, de la SRAA. Il n'y a pas eu de réveil vrai comme l'atteste l'absence de mémorisation recherchée en postopératoire.⁴

FIGURE Enregistrement du BIS en peropératoire avec 3 périodes d'« éveil »

J.-P. Lévecque MD
Y. Le Gulluche MD
S. Mérat MD
Paris, France

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Is the pain of intravenous catheter insertion associated with hemodynamic changes?

To the Editor:

Inserting an intravenous (*iv*) catheter may cause pain which may increase heart rate (HR) or blood pressure (BP). Lidocaine is often used to prevent pain before *iv* insertion. However, bacteriostatic normal saline containing benzyl alcohol as a preservative (NS-BA) may be as effective as lidocaine and cause less pain on injection.^{1–3}

We electively studied 60 adult patients. Patients randomly received, in a double-blind fashion, either NS-BA or lidocaine 1% via a 25g needle, or no drug, before inserting an 18g *iv* catheter. We measured HR and BP at one minute intervals for five minutes before and five minutes after *iv* catheter insertion. We measured pain scores at the time of drug injection and *iv* catheter insertion.

There were no differences among the three groups in HR or BP. Mean arterial BP and systolic BP were higher in the minute just before *iv* catheter insertion than five minutes after *iv* insertion in all groups ($P < 0.0003$). Heart rate was higher five minutes before *iv*

catheter insertion, than three or four minutes after *iv* catheter insertion in all groups ($P < 0.000001$).

There was no difference in pain on injection between NS-BA and lidocaine. There was no difference in the pain of *iv* catheter insertion between NS-BA and lidocaine. *Iv* catheter insertion without local anesthesia was more painful than *iv* catheter insertion without any drug ($P < 0.000001$). There was no correlation between verbal pain rating and HR or BP. The pain of *iv* catheter insertion does not increase HR or BP.

Kristin M. Babcock CRNA MS
David H. Wong PHARMD MD
Michele E. Gold CRNA PHD
Long Beach, California, USA

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Laryngoscope breakage

To the Editor:

When a patient is paralyzed, mouth wide open and airway totally unprotected, this is a very bad time to shower the lungs with very small metal parts. This is exactly what we recently faced after a laryngoscope Blade (Penlon #3) flew apart delivering a 1/16 inch diameter ball bearing, 3/16 inch spring, and light bulb and steel shaft, into the patient's posterior pharynx. On examination, the blade had fractured along the weld line, allowing the metal handle carrying the batteries to smash into the patient's front teeth. Somewhere under the blood running into the mouth, lay teeth, a ball bearing, spring and blade.

Fortunately, an ENT surgeon was working next door. All the parts were accounted for, and a post-operative chest x-ray showed no foreign bodies. Similar breakages have been reported before¹⁻⁶ but either age or chemical sterilization, or improperly made blade were implicated. Our blades are sterilized only with steam and are not old. I now subject every blade to pressure before introducing it into a patient's

mouth and have had all the blades in our hospital checked by the technician.

James G. Paterson MD
Toronto, Ontario

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