Correspondance

A Canadian history lesson

recent news item about Canada's Asupport of a UN resolution on nuclear disarmament1 included a photo depicting a woman protesting nuclear testing in 1961. It was unfortunate that the caption did not identify the woman as Senator Thérèse Casgrain, daughter of Lady Blanche MacDonald and Sir Rodolphe Forget. Senator Casgrain was well known not only for her social democratic ideas, but also for her defence of women's rights. It was because of her and her associates that women were finally given the right to vote in Quebec. She was an outstanding person who contributed a great deal to Canada and to Canadian history.

Giles P. Raymond

Professeur titulaire en médecine Université de Montréal Montréal, Que.

Reference

 Sibbald B, Maskalyk J. Canada's "lonely" stand in favour of nuclear disarmament. CMAJ 2003; 168(2):208.

Propofol syndrome in children

Eric Wooltorton's report about propofol reiterates the wellknown fact that the use of propofol for sedation in critically ill children has been associated with a life-threatening adverse reaction characterized by metabolic acidosis, hemodynamic instability, multiorgan failure, lipemia, hepatomegaly and rhabdomyolysis.^{2,3} Wooltorton speculates that this reaction, which he refers to as the "propofol syndrome," may be less common when the drug is used in children for procedural sedation or for induction or maintenance of general anesthesia. However, he contends that "significant harm can come from off-label use of agents whose pediatric safety profile is incomplete" and that "the known and theoretical risks of propofol should be explained to parents."

At the Hospital for Sick Children, propofol has been used in approximately 100 000 pediatric patients for sedation and general anesthesia without a single occurrence of the "propofol syndrome." This rate is less than the incidence of major perioperative complications.⁴ Our experience is similar to that at other centres,^{5,6} and thus the actual risk, if it exists at all, is minimal. Furthermore, a causal relation between propofol anesthesia and the syndrome has never been established.^{2,3,7}

The suggestion that the "propofol syndrome" may occur in the context of single bolus administration or short-term infusion in children is incorrect. Accordingly, we stand by our practice of not citing this issue when we inform parents or guardians of the risks associated with propofol anesthesia in the preoperative interview.

Mark W. Crawford
Director of Research
Bruce G. Dodgson
Director of Quality Management
Helen H.K. Holtby
Director of Cardiac Anesthesia
W. Lawrence Roy
Chief of Appethosis

Chief of Anesthesia Department of Anesthesia The Hospital for Sick Children

The Hospital for Sick Children Toronto, Ont.

References

- Wooltorton E. Propofol: contraindicated for sedation of pediatric intensive care patients. CMAJ 2002;167(5):507.
- Parke TJ, Stevens JE, Rice AS, Greenway CL, Bray RJ, Smith PJ, et al. Metabolic acidosis and fatal myocardial failure after propofol infusion in children: five case reports. BMJ 1992;305:613-6.
- Cray SH, Robinson BH, Cox PN. Lactic acidemia and bradyarrhythmia in a child sedated with propofol. *Crit Care Med* 1998;26:2087-92.
- Cohen MM, Cameron CB, Duncan PG. Pediatric anesthesia morbidity and mortality in the perioperative period. *Anesth Analg* 1990;70:160-7.
- Hatch DJ. Propofol-infusion syndrome in children. *Lancet* 1999;353:1117-8.
- Reed MD, Blumer JL. Propofol bashing: The time to stop is now! Crit Care Med 1996;24:175-6.
- Mehta N, DeMunter C, Habibi P, Nadel S, Britto J. Short-term propofol infusions in children. *Lancet* 1999;354:866-7.

Eric Wooltorton's¹ statement that critically ill children, especially

those with acute infections, should not be sedated with propofol in the intensive care unit is a well-known fact. This is the sole thrust of the March 2001 alert from the US Food and Drug Administration on this subject.²

Propofol is used safely in children around the world, so it is a considerable stretch to now suggest that the "[propofol] syndrome may be less common when the drug is used in less critically ill pediatric patients for short periods (e.g., for procedural sedation or for the induction and maintenance of general anesthesia)." In this context, what does "may be less common" mean? Almost never or never? Is this a "theoretical risk" to be explained to parents?

Except for 2 cases reported by Finley and colleagues,³ propofol has proven remarkably safe for anesthesia in children from the age of 3 weeks. For short procedures such as MRI, children with mitochondrial myopathies may be more safely anesthetized with propofol than with halogenated agents, barbiturates or nitrous oxide.⁴

I.A. Jeremy Sloan

Senior Staff Anesthesiologist The Hospital for Sick Children Toronto, Ont.

References

- Wooltorton E. Propofol: contraindicated for sedation of pediatric intensive care patients. CMAJ 2002;167(5):507.
- Diprivan (propofol). In: Medwatch: The FDA Safety Information and Adverse Event Reporting Program. 2001 safety information summaries. Washington: US Food and Drug Administration; 2001 Apr 25. Available: www.fda .gov/medwatch/safety/2001/safety/01.htm#dipriv (accessed 2003 Feb 13).
- Finley GA, MacManus B, Sampson SE, Fernandez CV, Retallick R. Delayed seizures following sedation with propofol. Can J Anaesth 1993;40 (9):863-5.
- Cohen BH, Shoffner J, DeBoer G. Anesthesia and mitochondrial cytopathies. Monroeville (PA): United Mitochondrial Disease Foundation; 1998. Available: www.umdf.org/ (accessed 2003 Feb 18).

[The author responds:]

My article on propofol highlighted the roles of *CMAJ*'s Health and Drug Alerts column: to emphasize warnings from recent international "Dear Healthcare Professional" letters, to distill key messages when such letters are vague and to bring debates from more specialized bodies of literature to our general medical audience. Questions about the exact frequency and risk factors for a so-called propofol syndrome in critically ill children are certainly worthy of future systematic and rigorous research. However, I believe the real issue is not whether the syndrome truly exists, but whether a single advisory from the US Food and Drug Administration (FDA) in 2001 is sufficient to put the issue to rest. We know from the cisapride story that even multiple warnings can fail to have an impact on physicians' prescribing behaviours.2,3 In the case of propofol, postmarketing adverse events (including deaths) continued to occur in Canada, despite the 2001 FDA warning, and were the reason that Health Canada issued its own warning.4 I felt it wise to echo these concerns, to frame the debate for those who were unfamiliar with it and to recommend that patients be kept informed.

I can appreciate the letter writers' concerns about whether or not to include "theoretical risks" in preoperative discussions with patients and their families. Although I usually choose to inform patients of all serious adverse events (including those that are rare), I admit that in writing this column I should have better emphasized the difference between concerns about propofol's use for the long-term sedation of critically ill pediatric patients and its relative safety in other contexts.

Eric Wooltorton CMA7

References

 Wooltorton E. Propofol: contraindicated for sedation of pediatric intensive care patients. CMAJ 2002;167(5):507.

- Sibbald B. Cisapride, before and after: still waiting for ADE-reporting reform. CMAJ 2001;165
 (10):1370.
- Postmarketing drug surveillance: what it would take to make it work [editorial]. CMAJ 2001;165 (10):1293.
- Propofol contraindicated for sedation in pediatric patients receiving intensive care. Ottawa: Health Canada; 2002 Jul 10. Available: www.hc-sc.gc.ca/hpb-dgps/therapeut/zfiles/english/advisory/tpd/propofol_pediatric2_e.html (accessed 2003 Feb 13).

Snowmobiler's hematuria

S nowmobiling is a common recreational activity in many regions of Canada and other countries with winter snow cover, but snowmobilers are at risk for traumatic injuries. I describe here a healthy man who experienced gross hematuria after long-distance snowmobiling. A MEDLINE search yielded no other reports of nontraumatic gross hematuria after snowmobiling.

A 40-year-old man experienced

McNeil

Children's Motrin

2 x 1/2 page, 4 clr.

New material