

## A Canadian history lesson

A recent news item about Canada's support of a UN resolution on nuclear disarmament<sup>1</sup> 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

1. 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<sup>1</sup> reiterates the well-known 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.<sup>2,3</sup> 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 propo-

fol 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.<sup>4</sup> Our experience is similar to that at other centres,<sup>5,6</sup> 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.<sup>2,3,7</sup>

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 Anesthesia

Department of Anesthesia

The Hospital for Sick Children

Toronto, Ont.

### References

1. Wooltorton E. Propofol: contraindicated for sedation of pediatric intensive care patients. *CMAJ* 2002;167(5):507.
2. 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.
3. Cray SH, Robinson BH, Cox PN. Lactic acidemia and bradyarrhythmia in a child sedated with propofol. *Crit Care Med* 1998;26:2087-92.
4. Cohen MM, Cameron CB, Duncan PG. Pediatric anesthesia morbidity and mortality in the perioperative period. *Anesth Analg* 1990;70:160-7.
5. Hatch DJ. Propofol-infusion syndrome in children. *Lancet* 1999;353:1117-8.
6. Reed MD, Blumer JL. Propofol bashing: The time to stop is now! *Crit Care Med* 1996;24:175-6.
7. Mehta N, DeMunter C, Habibi P, Nadel S, Britto J. Short-term propofol infusions in children. *Lancet* 1999;354:866-7.

Eric Wooltorton's<sup>1</sup> 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.<sup>2</sup>

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)."<sup>1</sup> 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,<sup>3</sup> 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.<sup>4</sup>

**I.A. Jeremy Sloan**

Senior Staff Anesthesiologist

The Hospital for Sick Children

Toronto, Ont.

### References

1. Wooltorton E. Propofol: contraindicated for sedation of pediatric intensive care patients. *CMAJ* 2002;167(5):507.
2. 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/safety01.htm#dipriv](http://www.fda.gov/medwatch/safety/2001/safety01.htm#dipriv) (accessed 2003 Feb 13).
3. Finley GA, MacManus B, Sampson SE, Fernandez CV, Retallick R. Delayed seizures following sedation with propofol. *Can J Anaesth* 1993;40(9):863-5.
4. Cohen BH, Shoffner J, DeBoer G. Anesthesia and mitochondrial cytopathies. Monroeville (PA): United Mitochondrial Disease Foundation; 1998. Available: [www.umdf.org/](http://www.umdf.org/) (accessed 2003 Feb 18).

### [The author responds:]

My article on propofol<sup>1</sup> highlighted the roles of *CMAJ*'s Health and Drug Alerts column: to emphasize