

ing system represents only one aspect of many activities in this area. Comprehensive risk-benefit evaluations include information from postmarketing surveillance on a global scale, which takes into account exposure to the drug in question and the results of epidemiologic research and clinical trials to determine whether a drug's benefits continue to outweigh its risks. Despite the limitations of spontaneous reporting systems and in the absence of complete evidence, it is well recognized that adverse reaction reports are but one of the factors that may contribute to a signal of potential problems. Drug safety is a shared responsibility, and health care professionals need to be made aware of all drug safety issues to enable informed therapeutic decision-making with their patients.

**Ann Sztuke-Fournier**  
**Marielle McMorran**

Editors  
*Canadian Adverse Reaction Newsletter*  
Marketed Health Products Directorate  
Health Canada  
Ottawa, Ont.

#### References

1. Drug marketing: Unsafe at any dose? [editorial]. *CMAJ* 2002;167(9):981.
2. Leflunomide (Arava): hematologic, hepatic and respiratory reactions. *Can Adverse React News* 2002;12(4):2-3.

## Antipsychotic drugs and diabetes

I read with interest Eric Woollorton's article about trials of risperidone involving patients with dementia<sup>1</sup> and would like to clarify an important point. In the article, Woollorton stated that "Risperidone . . . appears to cause diabetes." The cause of diabetes mellitus is in fact unknown. Rather, this condition is a multifactorial phenotype, and it is unlikely that any single factor will be sufficient to explain the illness in most populations. An article of which I was a coauthor<sup>2</sup> was inappropriately cited as a reference for the suggestion that risperidone causes diabetes mellitus; however, the cited article does not make such a statement.

It is emerging that several of the novel antipsychotics are associated with weight gain. Not only is this effect disquieting for patients, but it may also increase the risk of obesity-related morbidity. Furthermore, some predisposed patients receiving antipsychotic medications may have *de novo* glucose dysregulation, exacerbation of pre-existing diabetes mellitus or the induction of diabetic ketoacidosis. Although the risk associated with each of the commercially available novel antipsychotics is not definitively known, there have been significantly more cases of these problems with clozapine and olanzapine.<sup>3-5</sup> However, that being said, it remains inaccurate to say that either of these drugs "causes" diabetes.

**Roger S. McIntyre**  
Assistant Professor  
Department of Psychiatry  
University of Toronto  
Toronto, Ont.

#### References

1. Woollorton E. Risperidone (Risperdal): increased rate of cerebrovascular events in dementia trials. *CMAJ* 2002;167(11):1269-70.
2. McIntyre RS, McCann SM, Kennedy SH. Antipsychotic metabolic effects: weight gain, diabetes mellitus and lipid abnormalities. *Can J Psychiatry* 2001;46(3):273-81.
3. Gianfrancesco FD, Grogg AL, Mahmoud RA, Wang RH, Nasrallah HA. Differential effects of risperidone, olanzapine, clozapine, and conventional antipsychotics on type 2 diabetes: findings from a large health plan database. *J Clin Psychiatry* 2002;63:920-30.
4. Koro CE, Fedder DO, L'Italien GJ, Weiss SS, Magder LS, Kreyenbuhl J, et al. Assessment of independent effect of olanzapine and risperidone on risk of diabetes among patients with schizophrenia: population based nested case-control study. *BMJ* [Internet] 2002;325:243. Available: [bmj.com/current.shtml#PAPERS](http://bmj.com/current.shtml#PAPERS) (accessed 2003 Feb 25).
5. Koller EA, Doraiswamy PM. Olanzapine-associated diabetes mellitus. *Pharmacotherapy* 2002;22:841-52.

*Competing interests:* Dr. McIntyre is a paid consultant to Eli Lilly, Janssen, AstraZeneca, Wyeth, and Organon. He has received speaker fees from Eli Lilly, Janssen Ortho, AstraZeneca, GlaxoSmithKline, Lundbeck, Wyeth, Organon, and ORYX Pharmaceuticals.

## Responsibility in advertising

I was very concerned by the pictorial content of an advertisement for Marvelon (desogestrel-ethinyl estradiol) in

a recent issue of *CMAJ*.<sup>1</sup> The ad presents 2 images of the back seat of a car, the second with a child's car seat in place. The car seat appears identical to a model that is designed for rear-facing positioning only. In the ad, the seat is facing forward. This picture evoked a sickening feeling, because of the thought of what might happen to a child in this seat if the car were involved in a collision. I have seen the results of such events, and they can be devastating.

I believe that, given all of the community and manufacturer education that is available about proper installation of car seats, advertisers should also be responsible in their depiction of these restraint devices. The ad itself does not contain many words (and it relates to another subject altogether), but the picture is misleading. I am concerned that a parent might inadvertently, or purposely, install a car seat such as the one depicted in the incorrect manner shown in the ad.

We all know that the proper use and installation of child restraints can reduce the morbidity and mortality associated with motor vehicle collisions.<sup>2</sup> I urge both advertisers and *CMAJ* to promote and adhere to advertising excellence in a socially responsible manner. As physicians, we owe a duty of care to all who might see ads such as this one while reading *CMAJ*.

**Erika Mann**  
Resident, Diagnostic Imaging  
The Hospital for Sick Children  
Toronto, Ont.

#### References

1. "Oh baby!" advertisement for Marvelon (desogestrel-ethinyl estradiol). *CMAJ* 2002;167(2):114.
2. Howard AW. Automobile restraints for children: a review for clinicians. *CMAJ* 2002;167(7):769-73.

## [A representative of Organon responds:]

In response to the letters of Erika Mann and other concerned readers, Organon Canada has already submitted a new version of the "Oh baby!" Marvelon advertisement to Canadian med-

ical journals. The new ad, which started running in January 2003, displays a rear-facing car seat.

It was not our intent with the original ad to misdirect readers concerning the installation of car seats. Rather, the car seat was depicted this way to help readers understand at a glance the message of the ad, that unprotected sex can lead to unplanned pregnancy. Interestingly, although the Marvelon ad set out to deliver a very responsible message in one context, for some readers it communicated something very different in another context.

Given that the ad was placed only in medical journals, we trust that we have not inadvertently sent the wrong message to consumers. However, Organon has acted quickly to implement a solution that should satisfy everyone.

**Wayne Haddock**  
Senior Product Manager  
Organon Canada Ltd./Ltée.  
Scarborough, Ont.

## Of navels and urinating horses

I very much enjoyed *CMAJ's* 2002 Holiday Review. In particular, Carolyn Brown's reporting of the IgNobel prizes caught my attention, especially the item about navel-gazing.<sup>1</sup>

This little report immediately took me back some 56 or 57 years, to my second year of premed studies at the University of Saskatchewan. Our biochemistry lab professor, whose office was just off the lab, had told us to disturb him whenever we had problems or questions. At that particular time, we were studying the hormones found in urine and, among other things, were told about hormone replacement therapy, including the fact that the brand name Premarin (conjugated estrogen) was a short version of "pregnant mare's urine."

I had a question about my lab work and proceeded to the professor's office. He was very busy writing longhand on sheets of foolscap and did not look up

for a minute or two. I asked him if he was writing up some research, and he said "Yes, indeed I am" and showed me the title on page 1. It read "On Fuzz-Gathering about the Umbilicus." I don't know if he ever completed this aspect of his "research," but I wish now that I had taken more interest!

As I was about to leave his office after he responded to my query, he asked me to wait a moment and hurriedly penned a couple of lines on a sheet of paper, which he asked me to pass around the lab. If my memory serves me correctly, and I'm sure it does, the lines were as follows:

A permanently pregnant mare piddling perpetually produces more pee than an infinite series of mares peeing into pots periodically.

How I wish we had had more professors with his student rapport and sense of humour.

**Joe Golumbia**  
Family Physician  
Sidney, BC

### Reference

1. Brown C. IgNobel (3): navel-gazing. *CMAJ* 2002;167(12):1350.

## Osteoporosis in children: 2002 guidelines do not apply

The 2002 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada<sup>1</sup> cover both primary and secondary osteoporosis, but it is important to remember that these guidelines are based on evidence and experience with adult patients only and hence may not be applicable to younger patients.

Children and adolescents also experience fragility fractures, albeit rarely. In addition to their occurrence in association with genetic diseases (such as osteogenesis imperfecta), pediatric fragility fractures are seen in patients with immobilization (e.g., because of spinal cord injury), inflammatory diseases (e.g., juvenile idiopathic arthri-

tis), glucocorticoid pharmacotherapy and combinations of these factors, sometimes with concomitant nutritional deficiencies of calcium and vitamin D; such fractures may also occur in patients with hypogonadism.

However, the World Health Organization densitometry categories<sup>2,3</sup> cannot be applied in these cases, as T-scores for children calculated by standard methods are falsely low because there is no adjustment for their smaller size.<sup>4</sup> Although T-scores should be neither computed nor reported for children, interpretation of pediatric densitometry results is possible if one has knowledge of various normal ranges for bone mass that depend on age, sex, bone size, pubertal tempo and pubertal stage. This process is analogous to analyzing children's growth curves without knowing the parents' heights.

Also currently lacking are data relating bone mass measurements to fracture risk in these special populations. As a result, it may be advisable to diagnose and consider pharmacotherapy for pediatric osteoporosis in the severe category — children who have already experienced a fragility fracture and who have identifiable risk factors. This definition is conservative but probably appropriate, given the lack of sufficient efficacy and safety data in children for the agents used for preventing fractures in older adults.

As Canadian child health programs develop recommendations for care for osteoporosis in children, it is hoped that diagnostic and clinical trials research will progress to the point that satisfying, evidence-based guidelines on the management of pediatric osteoporosis can one day be included.

**Shayne P. Taback**  
Section of Endocrinology and Metabolism  
Department of Pediatrics and Child Health  
University of Manitoba  
Winnipeg, Man.

### References

1. Brown JP, Josse RG, for the Scientific Advisory Council of the Osteoporosis Society of Canada.