

status, patient satisfaction and consumption of nonpharmaceutical resources.<sup>1</sup> It is conceivable that patients who must switch drugs because of formulary constraints suffer more relapses, visit their physicians more frequently to review alternatives, undergo more new tests and procedures, and eventually become dissatisfied.

A recent review of health service utilization in British Columbia identified no significant changes associated with the introduction of reference-based pricing for histamine-2 receptor antagonists.<sup>2</sup> However, Westbrook<sup>3</sup> reported significant increases in rates of endoscopy after the introduction of a special authority policy for PPIs in Australia. These discrepant findings suggest that drug reimbursement policies differ in their impact on utilization of nonpharmaceutical resources. Indeed, the Australian policy required endoscopic proof of esophagitis for reimbursement, whereas British Columbia exempted gastroenterologists from prescribing restrictions. Further research is needed to clarify the impact of alternative drug formulary policies and to identify an optimal approach. We commend Westbrook for her efforts in this regard.

#### John K. Marshall

Assistant Professor  
Department of Medicine

#### Paul Grootendorst

Assistant Professor  
Department of Clinical Epidemiology  
and Biostatistics

#### Anne M. Holbrook

Associate Professor  
Department of Medicine  
McMaster University  
Hamilton, Ont.

#### References

1. Marshall JF, Grootendorst PV, O'Brien BJ, Dolovich LR, Holbrook AM, Levy AR. Impact of reference-based pricing for histamine-2 receptor antagonists and restricted access for proton pump inhibitors in British Columbia. *CMAJ* 2002;166:1655-62.
2. Hazlet TK, Blough DK. Health services utilization with reference drug pricing of histamine(2) receptor antagonists in British Columbia elderly. *Med Care* 2002;40(8):640-9.
3. Westbrook JL. Trends in the utilization of diagnostic upper GI endoscopy in New South Wales, Australia, 1988 to 1998. *Gastrointest Endosc* 2002;55(7):847-53.

## Telephone stroke

During head rotation, neck hyperextension and other provocative manoeuvres of the neck, the vertebral artery may be compressed at various sites along its course.<sup>1</sup> A 63-year-old man with a history of type 2 diabetes, hypertension and ischemic heart disease presented with symptoms of slurred speech, unsteadiness and left-side weakness immediately after a 56-minute telephone conversation. Physical examination revealed left facial droop with mild weakness of the left arm and hand grip of 4/5. Electrocardiography showed sinus rhythm. CT of the head (Fig. 2) showed calcification of the right vertebral artery and a small right pontine infarct. Duplex Doppler ultrasonography showed small atherosclerotic plaques at the distal common carotid arteries. The echocardiogram was normal.

Ischemia and infarction of the brain stem can occur if an abnormal posture of the neck is sustained for more than 10 minutes.<sup>2</sup> These problems have been reported after chiropractic neck manipulation,<sup>3</sup> protracted dental work, intubation, perimetry and x-ray positioning<sup>2</sup> and have been described in "beauty parlour stroke syndrome."<sup>4</sup> Given the temporal relation between the prolonged telephone conversation and the stroke, and exclusion of other causes, this man's right pontine infarct was probably the result of compression of the ipsilateral

vertebral artery during the phone call. He had kept his neck bent to the right side throughout the conversation, which caused compression of the already calcified right vertebral artery and resulted in stroke.

This case illustrates another situation in which a person may unconsciously keep the neck in an abnormal position that could cause compression or occlusion of the vertebral circulation. Anyone who talks on the telephone for prolonged periods, especially elderly people, should consider changing sides frequently or using a hands-free telephone to avoid sustained provocative neck positions.

#### Malvinder S. Parmar

Medical Director, Medical Program  
Timmins and District Hospital  
Timmins, Ont.

#### References

1. Grossman RI, Davis KR. Positional occlusion of the vertebral artery: a rare cause of embolic stroke. *Neuroradiology* 1982;23:227-30.
2. Fogelholm R, Karli P. "Iatrogenic" brainstem infarction: a complication of x-ray examination of the cervical spine and following posterior tamponade of the nose. *Eur Neurol* 1975;13:6-12.
3. Krueger BR, Okazaki H. Vertebrobasilar distribution infarction following chiropractic cervical manipulation. *Mayo Clin Proc* 1980;55:322-32.
4. Weintraub MI. Beauty parlor stroke syndrome: report of five cases. *JAMA* 1993;269:2085-6.

## Reserving judgement on HRT

In a recent commentary on hormone replacement therapy (HRT),<sup>1</sup> the authors began by saying that physicians have been prescribing hormones to women as a "wonder pill" without appropriate studies to fully evaluate the risks and benefits. They concluded by saying that the Women's Health Initiative (WHI) study tells us to avoid HRT as far as possible. Are the authors of the commentary not just as guilty of jumping to conclusions?

Granted, the WHI was well designed and well implemented. But what exactly does this study tell us? The WHI researchers have not stopped the arm of the study in which women who have had a hysterectomy are given estrogen only, so we might gather that this large



Fig. 2: CT of the head, showing calcification of the right vertebral artery (black arrow) and a right pontine infarct (white arrow).

group has not experienced an increase in heart disease, blood clots, strokes or breast cancer. This would lead us to conclude that medroxyprogesterone is the culprit, not estrogen and not necessarily the other very different progestins.

We have known for years that estrogen improves cholesterol levels<sup>2,3</sup> and that medroxyprogesterone negates that benefit.<sup>4</sup> The WHI has simply confirmed the negative effects of this one hormone preparation, nothing else. Hence, we should not jump to conclusions and condemn all other hormone preparations.

The risks and benefits of the other preparations remain to be painstakingly researched. Our menopausal patients expect nothing less.

#### Lianne Lacroix

Glenmore Medical Clinic  
Kelowna, BC

#### References

1. Yusuf S, Anand S. Hormone replacement therapy: a time for pause. *CMAJ* 2002;167(4):357-9.
2. Reid RL, Jolly E, Moreau M, McSherry J. Hormone replacement therapy and menopause: a clinical handbook. Ottawa: Society of Obstetricians and Gynaecologists of Canada; 1996.
3. Turek MA, Derzko C. Canadian Consensus Conference on Menopause and Osteoporosis. Part 2: Hormone replacement therapy and cardiovascular disease. Ottawa: Society of Obstetricians and Gynaecologists of Canada. *J Obstet Gynaecol Can* 2001;23:967-72.
4. Writing Group for the PEPI Trial. Effects of estrogen or estrogen/progestin regimens on heart disease risk factors in postmenopausal women. The Postmenopausal Estrogen/Progestin Interventions (PEPI) Trial. *JAMA* 1995;273:199-208.

*Competing interests:* Dr. Lacroix receives speaker fees from an annual public speech on menopause sponsored by a pharmaceutical company. In making these presentations, she sponsors no products and follows the guidelines of the Society of Obstetricians and Gynaecologists of Canada.

#### [The authors respond:]

Regarding our commentary,<sup>1</sup> Lianne Lacroix speculates that the ongoing

arm of the Women's Health Initiative Trial evaluating estrogens alone versus placebo has not been stopped because the results may be beneficial. Such speculation is dangerous, as there are no data from any randomized controlled trials that estrogen alone improves clinical outcomes in patients who take this preparation routinely. Until the results of the estrogen component of the WHI are available, prudence would dictate caution. While we do not "condemn all other hormone preparations," absence of proof of harm should not be assumed to mean proof of absence of harm. Therefore, it would be premature to recommend the routine use of any hormone preparation for the prevention of major vascular events until we have clear evidence of benefit from well-designed trials.

#### Salim Yusuf

Professor of Medicine

#### Sonia Anand

Assistant Professor of Medicine

McMaster University  
Hamilton, Ont.

#### References

1. Yusuf S, Anand S. Hormone replacement therapy: a time for pause. *CMAJ* 2002;167(4):357-9.

### Physicians' prescribing information: not for sale

Something seems to be missing from the CMA policy statement concerning physician information<sup>1</sup> that was recently published in *CMAJ*.

Drug companies have been reported to be soliciting physician prescribing profiles from pharmacists as a means of targeting their products to particular markets. My understanding is that the CMA does not approve of pharmacies releasing such information to drug companies, but I see nothing about this

issue in the policy statement. Am I missing something?

#### John Elliott

Physician  
Calgary, Alta.

#### [The CMA Associate Secretary General responds:]

Your impressions are correct: the CMA remains very concerned about the sale of physician prescribing data. This issue is addressed in a separate policy statement on the sale and use of individual physicians' prescribing data,<sup>1</sup> which was approved by the CMA Board of Directors in February 1997. The CMA continues to explore a range of options for addressing the sale of physician-specific information without consent.

#### Claude A. Renaud

Associate Secretary General and  
Chief Medical Officer  
Canadian Medical Association  
Ottawa, Ont.

#### Reference

1. Statement of principles: the sale and use of data on individual physicians' prescribing. Ottawa: Canadian Medical Association; 1997. *CMAJ* 1997;156(3):424A-D. Available: [www.cma.ca/cma/common/displayPage.do?pageId=/staticContent/HTML/N0/12/where\\_we\\_stand/1997/2-1.htm](http://www.cma.ca/cma/common/displayPage.do?pageId=/staticContent/HTML/N0/12/where_we_stand/1997/2-1.htm) (accessed 2002 Oct 8).

### Correction

The first name of Marian Faulds was misspelled in a recent death notice, which also failed to note that her husband, G. Emerson Faulds, had been on the active staff at the Victoria and St. Joseph's hospitals in London, Ontario.<sup>1</sup>

#### Reference

1. Deaths. *CMAJ* 2002;167(7):832.