more concerned about the potential impact on public health.⁵ The medical community must become more aggressively involved in combating future global environmental problems.

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References

- Kovats RS, Haines A. Global climate change and health: recent findings and future steps [editorial]. CMAJ 2005;172(4):501-2.
- Bernt-Erik S. Weather ruins winter vacations. Science 2000;288(5473):1975-6.
- Cotton PA. Avian migration phenology and global climate change. Proc Natl Acad Sci U S A 2003;100(21):12219-22.
- Arctic climate impact assessment overview report. Oslo (Norway): Arctic Monitoring and Assessment Programme; 2004. Available: http://amap.no/workdocs/index.cfm?dirsub=%2FACIA%2Foverview (accessed 2005 20 Feb).
- Alfven G, Arman T. [The greenhouse effect an issue for the medical profession.] *Lakartidningen* 2004;101(37):2834-5. Swedish.

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[One of the authors responds to Kue Young:]

G lobal average surface temperature is an established climatologic metric to describe global warming (or cooling). Further information is available in the assessment of Working Group I of the Intergovernmental Panel on Climate Change.³

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References

- Jones PD, New M, Parker DE, Martin S, Rigor IG. Surface air temperature and its changes over the past 150 years. Rev Geophys 1999;37:173-99.
- Jones PD, Moberg A. Hemispheric and largescale surface air temperature variations: an extensive revision and an update to 2001. J Climate 2003;16:206-23.
- 3. Working Group 1. Climate change 2001: the scientific basis [online]. Intergovernmental Panel on Climate Change; 2001. Available: www.grida.no/climate/ipcc_tar/wg1/index.htm (accessed 2005 Jun 24).

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Choice of antihypertensives after acute ischemic stroke

Andrea Semplicini and Lorenzo Calò address the thorny issue of managing hypertension in the setting of acute ischemic stroke. They emphasize the importance of selecting rapidly reversible agents "in case neurologic signs and symptoms worsen with the blood pressure reduction." They also mention the recommendations of both the American Stroke Association and the European Stroke Initiative in selecting an appropriate pharmacologic agent, either labetalol or sodium nitroprusside.

Labetalol given intravenously has an onset time of 5 minutes, a peak effect at 20–30 minutes and a duration of action of 3-6 hours.² In contrast, sodium nitroprusside has an onset time of less than 1 minute, a peak effect at 1–2 minutes and a duration of effect of 2–5 minutes.² Given these differences, is there really a role for labetalol (or any other agent, save intravenous nitroglycerin if acute myocardial ischemia is a concern) in a setting where the ability to rapidly titrate the drug to effect is of serious import?

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References

- Semplicini A, Calò L. Administering antihypertensive drugs after acute ischemic stroke: timing is everything. CMAJ 2005;172(5):625-6.
- Fisher NDL, Williams GH. Hypertensive vascular disease. In: Kasper DL, Fauci AS, Longo DL, Braunwald F, Hauser SL, Jameson JL, editors. Harrison's principles of internal medicine. 16th ed. New York: McGraw-Hill; 2005. Table 230-10, p. 1478.

Competing interests: None declared.

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[The authors respond:]

We did not discuss the relative merits of labetalol and sodium nitroprusside in our article, and thank Seamus Donaghy for pointing out the differences in duration of action between these 2 drugs.

It is true that labetalol has a longer duration of action than nitroprusside, but for the treatment of patients with acute stroke, we rely more on the fact that the onset of therapeutic effect is similar (in the range of a few minutes). Therefore, it is safe to start with a small (20 mg) intravenous bolus of labetalol, check if the desired blood pressure is achieved within 20-30 minutes and, if not, administer another bolus. In this way, it is possible to achieve a gradual reduction in blood pressure, without the risk of a too-rapid rise in blood pressure when the drug effect decreases.

Other considerations limit the use of nitroprusside: it requires continuous blood pressure monitoring (because of its short duration of action), it has toxic effects, and it is not readily available in many institutions.

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Reference

 Semplicini A, Calò L. Administering antihypertensive drugs after acute ischemic stroke: timing is everything. CMAJ 2005;172(5):625-6.

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Rehabilitation and acute stroke care

Quality-of-care indicators provide an important framework for developing consistent high-quality care. The commentary by Patrice Lindsay and associates¹ provides a framework for acute stroke care but fails to address the necessary link to rehabilitation services.

Although rehabilitation is acknowledged in the article's online appendix as an important component of stroke care,² the lack of a specific indicator addressing this link during acute care diminishes the importance of timely assessment of rehabilitation needs.