to be based on the characteristics of elemental and inorganic mercury, not methylmercury.

The half-life of methylmercury in blood is relatively long (approximately 44 days) and the concentrations in newly formed hair are about 250 times higher than in blood.[2] Once concentrated in hair, the level of methylmercury remains unchanged; measurements in consecutive hair segments are thus useful indicators of past exposure (depending on the length of the hair). Measurements in hair correlate with the total body burden. Indeed, measurements in the mother's hair corresponding with the last month of pregnancy are proportional to the methylmercury levels in autopsy brain samples from infants who have died within a few weeks of birth. It is not useful to measure urine levels because methylmercury is not excreted by the kidneys. Likewise, chelation has no place in the treatment of acute or chronic methylmercury poisoning; there is no specific treatment.

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References
1. Weir E. Methylmercury exposure: fishing for answers. *CMAJ* 2001;165(2):205-6.
2. Clarkson TW. The toxicology of mercury. *Crit Rev Clin Lab Sci* 1997;34(3):369-403.

[The author responds:]

I thank John Ruedy for his careful reading of this public health column[1] and for bringing forth Clarkson's excellent article[2] on the physiology and toxicology of mercury. In writing the column, I relied on a clinical review article[3] that distinguished diagnostic and management practices for mercury poisoning primarily on the basis of acute versus chronic exposure, rather than by type of mercury compound. It suggested that, in principle, blood samples provide the best modality for assessing acute poisoning, whereas urine and hair samples reliably measure chronic exposure. It also suggested that chelation therapy should be considered in cases of acute poisoning, with the caveat that chelation therapy is most effective for elemental mercury and least efficacious for methylmercury, although it cites a reference[4] to substantiate the effectiveness of 3 chelating agents in ameliorating methylmercury-induced developmental toxicity.

It is important that physicians be familiar with these principles because it may not be clear in most cases of suspected mercury exposure which mercury compound (elemental, inorganic or organic) is responsible for the poisoning. Having said that, it is evident both by Ruedy's letter and by Clarkson's article that these principles fail to translate into practice in the case of methylmercury poisoning, which, as Ruedy rightly points out, was the focus of the column. Methylmercury avidly accumulates in growing scalp hair and is mostly eliminated as inorganic, not organic, mercury through the fecal route.[2]

Trust Mercury, the messenger of the gods, to shun principles, to assume a disguise and to slip surreptitiously through the back door.

Erica Weir
Associate Editor
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1. Weir E. Methylmercury exposure: fishing for answers. *CMAJ* 2000;165(2):205-6.
2. Clarkson TW. The toxicology of mercury. *Crit Rev Clin Lab Sci* 1997;34:369-403.
3. Ozuah P. Mercury poisoning. *Curr Probl Pediatr* 2000;30:91-9.
4. Domingo JL. Prevention by chelating agents of metal-induced developmental toxicity. *Reprod Toxicol* 1999;9:105-13.

Corrections

In a recent letter to the editor by Kevin Kain,[1] the first sentence of the second paragraph should read as follows: "Unfortunately, artemisinin-based drugs have not been shown to be better than parenteral quinine (the current drug of choice in Canada) in decreasing the mortality associated with severe malaria.[2,3]"

References
1. Kain C. Ammunition against malaria [letter]. *CMAJ* 2001;165(5):529.
2. Tran TH, Day NP, Nguyen HP, Nguyen TH, Tran TH, Pham PL, et al. A controlled trial of artemether or quinine in Vietnamese adults with severe falciparum malaria. *N Engl J Med* 1996;335(2):76-83.
3. Van Hensbroek MB, Onyiorah E, Jaffar S, Schneider G, Palmer A, Frenkel J, et al. A trial of artemether or quinine in children with cerebral malaria. *N Engl J Med* 1996;335(2):69-75.

In a recent *CMAJ* public health article, advice on the clinical mangement of methylmercury poisoning in fact pertained to poisoning with elemental or inorganic mercury.[1] The error is addressed in letters in this issue.[2,3]

References
1. Weir E. Methylmercury exposure: fishing for answers. *CMAJ* 2000;165(2):205-6.
2. Ruedy J. Methylmercury poisoning [letter]. *CMAJ* 2001;165(9):1193-4.
3. Weir E. Methylmercury poisoning [letter]. *CMAJ* 2001;165(9):1194.