

We disagree with de Gans et al. with respect to the four-tube method. This test can still be useful within the first few hours after subarachnoid hemorrhage, when xanthochromia has not yet developed.

We thank Sherlock et al. and Tritos for pointing out the importance of dysfunction of the hypothalamic–pituitary axis in patients after subarachnoid hemorrhage. We agree that recognizing and treating endocrinologic abnormalities may be important. As we mentioned in the text, virtually every patient has medical complications, which may be severe in 40 percent of cases. Such complications include hypopituitarism. Because

of space limitations, we commented on the most common medical issues only.

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Lead Shot in the Appendix

TO THE EDITOR: Cox and Pesola (Dec. 29 online issue)¹ describe lead-shot accumulation in the cecal appendix of an Alaskan native, which was probably caused by the ingestion of shotgun-culled waterfowl. Their description did not mention the potential for lead absorption and systemic toxicity. Blood lead levels almost twice those of controls may be found after sequestration of just one or two shot pellets in the appendix²; a toxic level of lead (67.4 μg per deciliter) was reported after the retention of 29 pellets.³ The authors' comment that shot in the appendix is commonly seen in Alaskan natives suggests an important public health concern. Presentations of adult lead poisoning (plumbism) range from nonspecific symptoms to acute encephalopathy. Children absorb lead more readily than do adults, which can result in reduced IQ; the fetus is particularly susceptible. Interventions include screening, medical management, public health education, and promotion of the use of steel shot instead of lead. Within the indigenous community, reduced lead levels would confer substantial health benefits.

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THE AUTHORS REPLY: In 1991, the United States instituted a nationwide ban on lead shot for waterfowl hunting, owing in part to the concern regarding lead toxicity from this practice. Unfortunately, the ban does not extend to all hunting; thus, there is a risk to hunters and others who inadvertently eat lead from their catch.¹ Countries such as Denmark and the Netherlands have a complete ban on lead for hunting; alternatives to lead shot include bismuth, steel, tin, and tungsten. Therefore, a solution to lead ingestion and potential toxicity problems is present.

As Schep and Fountain suggest, it is reasonable to screen for lead when shot is found in the appendix during radiography. If an elevated lead level is found, appropriate action should be taken. We did not know the blood lead level in the patient in our report, since she had been sent for radiography some years earlier. In the future, all such testing will include a suggestion to obtain a lead level in similar clinical situations.

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