

The Weekly Newsmagazine of Science

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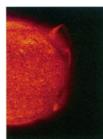
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Cover: Twisted, fiery braids of hot, charged solar gas stretch hundreds of thousands of kilometers into space. Researchers have recently learned to create miniature, laboratory versions of solar features to help explain the sun's characteristics. The SOHO satellite's X-ray telescope spotted these solar prominences on Jan. 10, 1998. Page 200 (Colorized image: Rust et al./Johns Hopkins Applied Physics Laboratory)

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Letters

Thoughts for your penniesThe alarming article "Newer pennies pose a special toddler risk" (SN: 12/5/98, p. 358) erroneously leads the reader to the distorted conclusion that killer pennies pose an imminent and grave threat to the nation's

Among the estimated 21,000 pediatric coin ingestions that lead to emergency department visits, complications remain exceedingly rare. Among coin ingestions reported to U.S. Poison Centers in 1997, 98 percent passed naturally and uneventfully through the gastrointestinal tract.

The more common problems are a coin becoming lodged in the esophagus or a coin being sucked into the trachea. If the radiograph shows the coin to be in the stomach or bowel, then no emergency action is necessary, and the coin will routinely appear in the feces within a couple of days.

Michael E. Mullins Oregon Health Sciences University Portland, Ore.

Your article on the risk of ingested pennies minted after 1981 caused me to reflect on the current treatment of ingested coins, a common pediatric problem.

Like other emergency physicians, I have considered swallowed coins to be generally innocuous. I agree with Dr. O'Hara's speculation that small cracks in the copper skin caused the zinc to escape and cause ulceration in the patient, so as these newer pennies age we may see this syndrome with greater frequency.

Once an ingested coin is identified as a penny (easily done radiographically), daily Xrays of the coin should be taken until it passes in the stool. If the patient displays gastrointestinal problems or if the penny shows the moth-eaten appearance described by Dr. O'Hara, then aggressive retrieval is indicated. Absent these, the therapy that has served thousands of patients and their anxious parents well still applies. In any case, further study is clearly warranted.

Dennis C. Whitehead Dickinson County Hospital Iron Mountain, Mich.

Dr. O'Hara hypothesized that the problem described arose because newer pennies consist of copper-coated zinc and cracks in the copper "skin" could "allow the stomach's hydrochloric acid to dissolve some of the zinc into a toxic, ulcerating soup." The first problem with this scenario is that zinc ion is highly soluble and relatively nontoxic. It seems more likely that the ulcer was caused either by the penny's jagged edges or perhaps by toxic copper salts. In either case, this begs the question, why would newer pennies be more dangerous than older ones? If, however, the ulcer is due to the jagged edges of a partially dissolved coin, then newer pennies may indeed be more dangerous than older ones.

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