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COVER: A controversial drug made from poisonous-snake venoms has federal regulators and the world's lead-ing venom producer at odds. New research may point the way toward a resolution anxiously awaited by thousands way toward a resolution anxiously awaited by thousands of patients with intractable diseases now taking the drug. See story p. 362. (Cover montage by Elizabeth Clark)

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# **EMP** replies

Your article "How Likely Is a Rain of EMP?" (SN: 5/9/81, p. 301) contains the most chilling statement I've seen in print: the matter-of-fact assertion that "military strategists" now consider full-scale nuclear warfare a "real option."

Option for whom? For what? Nothing has really changed except the so-called minds of the military strategists. An all-out nuclear war is still holocaust, still genocide on an unprecedented scale, far worse for the human race than anything the Nazis ever contemplated. Have our Pentagon "patriots" grown so bored, so eager for war games that they've totally forgotten the interests of the people they're supposed to protect?

How could any decent, rational human being seriously suppose that the people of this country (or any country) could "win" anything via nuclear war? (I'm not talking about "governments," whose political imperatives are rarely of more than passing interest to their citizens.)

Acceptance of nuclear warfare as a "real option" is a none too subtle indication that the option may indeed be used. The reasoning of the strategists strikes me as suspiciously parallel to that which produced the "Jones Massacre." The Reverend Jones forced his followers to die rather than compromise their lifestyle. Those who accept nuclear war as a "real option" must be thinking along the same lines.

Any student of western history should recognize that every genuine advance in human civilization derives from a breakthrough in learning ("research and development," if you will) while the policies of whatever governments happen to exist have only marginal significance, usually negative. In my opinion, no government actively considering all-out nuclear war as a "real option" merits allegiance its leaders are too depraved to deserve the public trust.

Robert A. Collins Boca Raton, Fla.

Your fine series on electromagnetic-pulse vulnerabilities blacks out this issue: Would nuclear power plants on line during an unanticipated EMP event shut down or melt down? In a nationwide EMP-out, about 70 U.S. reactors would lose their computers and transistorized control circuitry, as well as both onsite and offsite power. The Nuclear Regulatory Commission has no regulations specifically aimed at EMP-hardening nuclear generating stations. Could a meltdown have been averted at TMI without the control room? Has our government conveniently arranged for all operating nukes in an EMP region to spill their radioactive guts on the taxpayers?

L. Douglas DeNike, Ph.D. Los Angeles, Calif.

## Some bones to pick

I was encouraged to read of the research being done on bone regeneration in your article "To Make Bones About It" (SN: 5/14/81, p. 317).

As a demonstration of the efficacy of using a demineralized bone preparation, the article opened with the case history of a hockey player with a "bone cyst." Accompanying reproductions of radiographs of this case were also included.

Without making a judgment on the usefulness of this technique, I would like to comment on the diagnosis made on the hockey player whose case history opened the article. Firstly, the radiographs used to make the diagnosis of the "bone cyst" are highly suspect in their reliability. The radiographic technique used shows poor standardization from the pre-operative to post-operative X-ray. Specifically, the "before bone powder" X-ray is far more exposed than the four-month and fourteen-month post-operative X-rays. If one were to make the diagnosis of bone cyst from this pre-operative X-ray, then to be consistent you would also have to make a diagnosis of perforation or loss of the floor of the sinus and floor of the nasal passage. Indeed, due to the burnout of this film, one might conclude that there is extensive decay of several of the molars. But all of this is clearly not apparent in the fourteen-month post-operative film. I am suggesting that in fact this patient never even had a cyst to begin with. Bone in this area is often less dense due to a concavity where the submaxillary gland lies. Furthermore, even if it were clearly established that there were a cyst here, it would not be unusual for a hockey player to acquire a traumatic bone cyst in this area. The treatment for this type of cyst is to enter the cavity, scrape the area, and close. If you felt you wanted to sprinkle some demineralized pulverized bone into the cavity you probably would not induce much harm aside from a foreign body reaction. However, to give credit to the powder for the healing in this case appears unjustified.

As scientists we must all maintain the highest degree of skepticism even with the most encouraging apparent results.

Barrow Marks, D.D.S. Kew Gardens Hills, N.Y.

("The diagnosis of a cyst was made on the basis of multiple X-rays -not just on the basis of the X-ray shown," says Julie Glowacki of Harvard Medical School in Boston, Mass. "Admittedly, the X-rays are poor; however, we also can document the cyst with intra-operation photographs," she says.

Regarding the appropriate treatment, "In young patients with small defects, it is true there is a percentage of spontaneous regeneration of the bone," Glowacki says. "But in a boy this age with a cyst of this size, conventional treatment would be to graft from the hip bone."—Ed.)

I found the article very interesting, but in the dental X-rays the top two pictures show three molars in the lower jaw (X-rays and schematic) and in the 14th-month post-op the lower third molar is missing and there is no evidence of healing that would have occurred if it had been extracted within a 14-month period. Also, the shape of the upper third molar in the 14thmonth post-op seems different from the other two pictures.

Would you enlighten me on this apparent discrepancy?

Brownell R. Jamison Alexandria Bay, N.Y.

(At six months post-op, four molars were extracted from the patient.—Ed.)

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