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## Letters

### Not acupuncture

"Acupuncture: An old debate continues" (SN: 8/20/88, p. 122) cites a talk I gave at the World Congress of Medical Physics and Bio-engineering. It indicates that we used acupuncture to induce analgesia in rats. We do not use acupuncture in our experiments. Rather, we have been investigating trans-cranial electrostimulation (TE). This is very different from acupuncture. TE is delivered at about 10 microamps, well below sensory threshold, and does not elicit a flinch or startle response in the subject.

We found that TE applied with certain voltage, current and waveform structure did induce significant analgesia. We also found that naloxone, an opioid antagonist, blocked the analgesia effect induced by TE.

Malcolm Skolnick  
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- 249 Clouds Without a Silver Lining

Cover: Made of frozen nitric acid and ice, clouds in the Antarctic stratosphere play an integral role in creating the ozone "hole" by helping chlorine pollutants destroy ozone. Scientists believe the stratospheric clouds most critical to this process form thin veils at altitudes of about 20 kilometers. More beautiful but probably less culpable in ozone destruction are the pinkish nacreous clouds, also called "mother-of-pearl," that fill the lowest part of the stratosphere against the backdrop of a sunset's afterglow in this photo, taken from Antarctica's McMurdo Station in September 1987. (Photo by Jerry Harder, © American Geophysical Union)



### Departments

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### Results disputed

"Sound advice for deaf learners" (SN: 7/30/88, p. 21) reports claims by a study of "oral" deaf students by Geers and Moog which are not supported by the data and seriously misrepresents two studies of deaf children taught through "total communication" (oral plus manual) instruction, for which I was principal investigator. All three studies were funded by NIH to study factors predictive of literacy in deaf adolescents. All three contracts stipulated that every effort be made to identify and test poor readers as well as good readers. We followed the terms of the contract; in fact, we eliminated 21 eligible students from Gallaudet University from our group (whose achievement was far superior to that reported for the oral-only subjects) in order to achieve a balance of good and poor readers. Since this was reported, it is professionally irresponsible for Geers and Moog to misrepresent our two studies.

The results of the Geers and Moog study do not support the traditional oral-only approach but rather represent a devastating indictment of the failure of the traditional

private oral schools for the deaf and highlight their isolation from the mainstream of American education. Geers and Moog originally proposed testing up to 100 oral-only adolescents from three private residential schools for the deaf, with the Central Institute for the Deaf (CID) being the largest source. In pilot testing it became obvious that one-third to one-half of the "oral" sample, consisting of adolescents who had begun their education at CID, had transferred to total communication programs. Rather than work through the public schools, the researchers obtained the final sample by advertising an all-expenses-paid one-week camp in St. Louis with assorted field trips in exchange for 10 to 12 hours of testing. Subjects from ages 15 to 18 were flown in from Connecticut to Hawaii and from Quebec to British Columbia. CID, the best-known private oral school for the deaf in the United States, produced only 10 children who met the criteria.

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