

scans with mental performance tests to study anorexics.

They performed CT brain scans on 23 teenage anorexics. In 21 they found numerous spaces over the top of the cerebral cortex and a fissure between the two hemispheres of the brain. These are anatomical features not normally present in young people and are the precise features noted by other researchers visualizing anorexics' brains with CT scans. Seven of the 21 patients also showed a slight enlargement of ventricles inside the brain, and two of the 21 with particularly severe anorexia likewise had abnormally wide spaces in the cerebellum of the brain. The two remaining patients out of the 23 showed no brain abnormalities; they were the patients who had suffered anorexia for the shortest time. At the time of the scans, the researchers also gave all 23 patients tests to measure their IQ, concentration, reaction time and perceptual speed. The patients' IQs were comparable to those of the normal healthy population, but their concentration, reaction time and perceptual speed were slightly below those of the normal healthy population.

Eleven of the 23 patients who eventually returned to a normal weight were then given repeat CT brain scans and mental performance tests; the results were compared to the patients' previous ones. There was a significant reduction in the number of cortical and cerebellar spaces and interhemispheric fissures among all the patients. Only one of the 11 had had enlarged ventricles; they were still enlarged. The patients showed no change in IQ, but improvement in concentration, reaction time and perceptual speed.

While anorexia may be caused by psychological problems, the illness itself can lead to mental impairment, and this impairment in turn appears to be due to brain abnormalities, Kolhmeyer and his co-workers conclude. When patients return to a normal weight, though, the brain abnormalities and mental impairment appear to be largely reversible.

Still to be answered is how anorexia triggers the brain abnormalities noted in anorexics. It probably does so by shrinking the brain through nutrition and water loss, contends Arnold E. Andersen, director of the Eating and Weight Disorders Unit at Johns Hopkins University School of Medicine in Baltimore. Daniel Weinberger of the Adult Psychiatry Laboratory in St. Elizabeth's Hospital in Washington agrees: "CT scans are sensitive enough to pick up some variances in fluid status in the brain." However, Kolhmeyer and his co-workers found no indication that their 23 subjects were suffering severe malnutrition or severe water loss during anorexia, as chronically starved persons do. Still, the investigators admit, "it would be valuable to obtain cranial CT findings on chronically starved subjects and to compare them to those of anorexics."

—J.A. Treichel

VA yields control of Agent Orange study

Yielding to congressional pressure, the Veterans Administration has agreed to give up control of an investigation into whether Vietnam veterans were harmed by exposure to the chemical defoliant Agent Orange. "It has become increasingly apparent that a broad consensus has developed supporting the belief that it would be in the best interest of our veterans to have a non-VA scientific body conduct the Agent Orange epidemiology study," VA Administrator Robert P. Nimmo said in an Oct. 14 letter to Health and Human Services Secretary Richard S. Schweiker. "While I remain firm in my belief that the VA has proceeded reasonably," he continued, "I have been persuaded as to the wisdom of the House Veterans Affairs Committee recommendation that the Centers for Disease Control [a division of HHS] conduct the study."

Nimmo's decision to turn the study over to the CDC came shortly after he received a letter signed by more than 100 members of the House of Representatives who requested such a move. Three years ago, Congress ordered the VA to embark on an Agent Orange health-effects study. Veterans exposed to this dioxin-containing

herbicide link it to a variety of health problems, including cancer and birth defects in their offspring. The purpose of the epidemiological study is to determine whether Agent Orange in fact caused such difficulties and whether disability compensation should be paid. When VA officials recently announced that data needed to address these issues probably would not be obtained until 1989 (SN: 9/4/82, p. 149), the agency was accused of deliberately trying to delay the project, and pressure to let CDC officials investigate the veterans' health complaints began to mount. Says HHS official Shirley Barth, "it seems reasonable" to assume that CDC will agree to take over the Agent Orange study. "We've seen this coming," she says. Critics of the Veterans Administration say that such a change of hands ultimately will lead to a speedier resolution of the Agent Orange issues.

Meanwhile, a General Accounting Office report criticizing the VA's handling of the Agent Orange problem is expected to be released this week. The GAO study was undertaken at the request of Sen. John Heinz (R-Pa.) and Rep. Thomas J. Downey (D-N.Y.).

—L. Garmon

EPA restricts use of pesticide toxaphene

The news conference held by the Environmental Protection Agency last week was billed as an opportunity for the agency to announce major restrictions on the use of toxaphene, once the most widely used pesticide spray in the United States. But before EPA Assistant Administrator John A. Todhunter got around to detailing those restrictions, he charged the previous administration with gross inaction in the area of pesticide regulation. After the conference, several members of environmental groups agreed that the event was staged in an attempt to divert attention from the current administration's mishandling of pesticide matters more serious than the toxaphene situation.

Toxaphene, a complex mixture of chlorine-containing compounds, now is used primarily on cotton, soybeans, sorghum, wheat, peanuts and as a spray or dip to fight scabies on beef cattle and sheep. While use of this chemical is confined largely to the South, residues of the pesticide have been detected in fish from the Great Lakes since 1974, suggesting atmospheric transport of a persistent environmental contaminant. In addition, research data indicate that such residues are harmful to fish and other "non-target" species; finally, animal tests suggest that toxaphene could pose a cancer risk to humans.

Because of these risks, EPA last week announced it is banning the widespread spraying of toxaphene on cotton and several other major applications that to-

gether comprise about 95 percent of current toxaphene use. Use of the chemical to dip or spray livestock, to treat pineapple and banana crops in the Virgin Islands and Puerto Rico and to battle "emergency"-size outbreaks of certain pests such as the armyworm, cutworm and grasshopper will continue. The ban on the other toxaphene applications will take effect in about 30 days.

The government first placed the pesticide in a special review category in 1977, as a first step toward restricting its use, Todhunter said at the press conference. "Why the Carter administration failed to resolve the status of toxaphene is not known to us," he said, but "this administration is not indecisive; I don't think we're afraid to face up to and to deal with our environmental problems."

But Ellen Silbergeld of the Environmental Defense Fund says that the most serious pesticide-related environmental problem is not the status of toxaphene, but rather EPA's "systematic abuse" during the Reagan administration of its authority to grant emergency uses of pesticides for situations in which the chemicals are normally outlawed. Silbergeld notes that from July 1, 1978 to July 1, 1979, EPA permitted only 112 such emergency uses of pesticides; from Oct. 1, 1981 to July 31, 1982, 225 emergency uses were granted. Says Silbergeld, "This is the real hot issue in pesticides — just what kind of abuse is going on?"

—L. Garmon