

Joel Greenberg reports from New York City at the meeting of the American Psychiatric Association

TD and the depressed patient

While antipsychotic drugs, or neuroleptics, have been a boon to persons diagnosed as schizophrenics — at least in terms of enabling them to function outside of hospitals—a persistent and possibly irreversible side effect is tardive dyskinesia (SN: 5/24/80, p. 335). The affliction, an involuntary twitching of facial areas and other parts of the body, has been documented in numerous studies of schizophrenics.

Now, however, a preliminary but growing body of evidence suggests that depressed patients who take neuroleptics may be at even higher risk than schizophrenics for developing TD. Neuroleptics are used with some depressed patients on a limited basis for sleep problems and other difficulties not directly associated with the depression.

In a review of several studies, Daniel E. Casey of the Veterans Administration Medical Center in Portland, Ore., noted surprisingly high percentages (as high as 50 percent) of depressed persons in TD study populations. "Some of the worst cases of TD were seen in persons with affective disorders [depression and manic-depression] who have taken brief doses of neuroleptics," says Casey. "Anybody who uses neuroleptics can get TD, even if they're not psychotic."

One of the most baffling findings came in a National Institute of Mental Health study of manic-depressives that found tardive dyskinesia symptoms prevalent almost exclusively during the depressive phase. "It was hard to believe," Casey says. "It looked like someone had given them more medicine [during the depressive phase], but they hadn't." He suggests that lithium, the standard drug treatment for manic-depression, "possibly reduces TD, but we don't know what the risks would be if you give lithium to people [already] on neuroleptics."

In similar studies using very small numbers of subjects (seven and 11, respectively), John M. Kane of Long Island Jewish-Hillside Medical Center and Murray Alpert of New York University department of psychiatry also reported unexpectedly high rates of tardive dyskinesia among depressed patients.

Hammering the Soviets: The sickle-sell

The decision of the Soviet All Union Society of Psychiatrists and Neuropathologists to resign from the World Psychiatric Association (SN: 2/19/83, p. 116) still reverberates throughout the world's psychiatric community. In a forum on the international abuse of psychiatry, psychiatrist Harvey Fireside of Ithaca, N.Y., estimated that 9,000 to 10,000 political dissidents are detained under psychiatric pretexts in the Soviet Union — about 1,500 in special "psychiatric prisons" and the rest in hospitals; Fireside added, however, that only about 10 percent of these estimated cases have been documented.

At the forum, a copy of the Soviets' letter of resignation from the WPA was released. In the letter, signed by 18 psychiatrists, the Soviets allege that a "slandering campaign, blatantly political in nature, is directed against Soviet psychiatry in the spirit of the 'cold war' against the Soviet Union." The letter singles out the American Psychiatric Association and the U.S. State Department as leading "this propaganda campaign... a U.S. government body is actively interfering in the work of national, non-governmental organizations, and indirectly, in the work of the WPA." The Soviets go on to defend their diagnostic and treatment techniques and state that visiting Western psychiatrists in recent years have expressed no such allegations after observing Soviet psychiatric facilities firsthand.

In its reply, the WPA expresses surprise and dismay at the Soviet withdrawal (even though it was considered quite possible that the WPA would have voted at the upcoming World Congress of Psychiatry in Vienna in July to expel the USSR). And it urges the Soviet psychiatrists to reconsider their decision to withdraw from the Association.

Tadpole role in gastric pregnancy

A rare Australian aquatic frog broods its young in its stomach. The female of *Rheobatrachus silus* swallows fertilized eggs or young larvae, and at least eight weeks later young frogs emerge from her mouth. What keeps the mother from digesting her offspring? Michael J. Tyler of the University of Adelaide, South Australia, and colleagues report in the May 6 SCIENCE that the young tadpoles release from their mouths copious, fine cords of mucus containing an inhibitor of gastric acid secretion. This inhibitor now has been identified as prostaglandin E₂ (PGE₂). While the female is brooding young, the stomach musculature undergoes modifications typical of an absence of acid secretion. "Our results suggest that in *R. silus* PGE₂ inhibits acid secretion in a manner not seen elsewhere in the Animal Kingdom," the scientists conclude.

Unlikely lemur birth at primate center

The only collection of rare collared lemurs in captivity is increasing, sometimes against all odds. The collared lemur is a threatened species that occurs in the southeastern forests of Madagascar. Recently an elderly female of 30 years (the equivalent of an 80-year-old person, according to Elwyn Simons of the Duke Primate Center) gave birth to a baby one-quarter the weight of a normal lemur newborn. The baby, named Chiclette, was kept in an incubator and hand fed for two weeks, but her weight increased only from 27 grams to 34 grams. Subsequently her older sister gave birth to a normal weight lemur and now is nursing both babies, who are doing well. Chiclette's birth was a surprise because, in addition to the age of her mother, her father had been thought incapable of breeding due to his early imprinting on people and chickens and his aggressive behavior toward lemurs.

Animal briefs

- The sonar system that allows porpoises to use high-frequency sound waves to navigate depends on highly specialized fatty material, lipids, in the porpoise forehead. Donald C. Malins and Usha Varanasi of Seattle University find in the center of the porpoise forehead an area of unusual lipids made of isovaleric acid, a small molecule rarely found in lipids of other animals. From the three-dimensional arrangement of the lipids, they conclude the porpoise has a "sound lens" made of fat, which focuses sound in the head or directs it as a beam in the water.
- Tadpoles can recognize kin, even when they have been raised in isolation. In the laboratory and in mountain ponds they will stay close to their siblings, report Andrew R. Blaustein of Oregon State University in Corvallis. Tadpoles also prefer to associate with half brothers and half sisters (either the mother or father may be shared) rather than with non-kin. "Never has such finely tuned kin recognition been pinpointed in a creature other than a mammal," Blaustein says.
- Two pairs of peregrine falcons, an endangered species, raised in captivity and released by Cornell University biologists have made nests and produced eggs in New York City bridges. The nests are located below roadway level in the Verrazano Narrows Bridge and Throggs Neck Bridge. Other peregrine falcons, still too young to have eggs, have established headquarters in bank buildings in Los Angeles, and one pair has chosen a casino in Atlantic City, N.J. In 1980 two captive-raised falcons hatched eggs and raised young in coastal marshes of New Jersey, but so far none have hatched their own young in a city environment.
- The bald eagle breeding program of the U.S. Fish and Wildlife Service received a \$50,000 grant from the Du Pont Co. This funding is expected to more than double the number of eaglets produced in captivity at the Patuxent Wildlife Research Center in Laurel, Md.