Schizophrenia: Support Therapy Gets Boost

How well does psychoanalytically oriented psychotherapy, with a focus on self-understanding and unconscious motivation, work with schizophrenic patients? That question has provoked heated arguments among mental health workers for several decades. The recent ascent of antipsychotic drugs and social support techniques for people with psychiatric disorders has fueled the debate. For the most part, the controversy has revolved around theoretical preferences rather than well-conducted psychotherapy research.

Now, however, an exhaustive two-year study conducted by psychiatrists at McLean Hospital in Belmont, Mass., indicates that "supportive" therapy has advantages over "expressive, insight-oriented" therapy for schizophrenics.

On many outcome measures, including cognitive functioning, emotional control and the ability to form relationships, John Gunderson and colleagues report that there were insignificant differences between patients in the two groups. But they conclude in the latest issue of SCHIZOPHRENIA BULLETIN that patients given supportive therapy spent considerably more time outside of the hospital and in full-time employment.

Only 95 of 164 patients originally recruited completed the minimum six months of treatment to qualify for the study. The fact that so many schizophrenics quit high-quality therapy when they were not required to pay for it is "a major finding in itself," the psychiatrists say.

The patients had had recent psychotic episodes but were able to take part in therapy. They were between the ages of 18 and 35 and had normal IQs.

A total of 81 experienced therapists in the Boston area participated in the study. "Expressive, insight-oriented" therapists concentrated on a patient's relationship to the therapist and past and present conflicts. In contrast, "reality-adaptive, supportive" therapists focused on solutions for current problems and shoring up a patient's psychological defenses. Although the latter group places more emphasis on drug treatment, all the subjects received about the same dose of antipsychotic medication to control for its effects on the outcome.

The researchers, who ironically are proponents of insight-oriented therapy for schizophrenics, say that supportive therapy was superior "by some external standards." It takes up less time and improves work performance among patients who often have a hard time holding down a job, they note.

In the same issue, several schizophrenia researchers laud the study for its thoroughness while offering varying interpretations of the results.

The findings are limited because a "no psychotherapy" control group was not examined, points out William T. Carpenter Jr. of the Maryland Psychiatric Research Center in Baltimore. The general effectiveness of the two therapies was about equal, he adds, but supportive therapy is more practical and costs less.

Gerald L. Klerman of Massachusetts General Hospital in Boston goes farther and says that the evidence justifies dropping further research on insight therapy for schizophrenics and looking more closely at family therapy.

But the high dropout rate in the study calls any conclusions into question, says Bertram P. Karon of Michigan State University in East Lansing. Patients may have left to avoid medication or because the treatment made them worse, he argues. The results are skewed, he adds, because antipsychotic drugs dampen emotions and interfere with insight therapy.

Gunderson and co-workers note that patient outcomes varied considerably. Further analysis may reveal whether specific therapist interventions are associated with specific outcomes. — *B. Bower*

Learning the T cell handshake

Fraternity brothers have a secret handshake to distinguish one of their own from an outsider. Scientists studying a chief immune cell in the body to understand how it detects foreign invaders still have a lot to learn about the "handshake" the cell uses, but they now think that they may have identified most, if not all, of the "fingers."

The cell under scrutiny is the T cell, a regulator in the immune system that, among other functions, tells other cells when to step up or dampen their efforts to seek out and destroy infectious agents, tumors or foreign tissue. Last spring, two groups of scientists reported independent discovery of the genes that control production of one of two linked peptide chains on the T cell's surface that together serve as a specialized receptor molecule for recognizing foreign substances (SN: 3/17/84, p.166). Now several studies indicate that the genetics behind the second half of the receptor, the alpha chain, have been nailed down as well. With an apparently full set of genes for the receptor in hand, researchers say they can move on to explore, at a molecular level, how the protein is assembled in the maturing T cell and more precisely study how it distinguishes between a foreign substance or cell, and one of the body's own.

Gek Kee Sim describes in the Dec. 20 NATURE work on the genetics of the alpha chain with John W. Kappler and other coworkers at National Jewish Hospital and Research Center in Denver, Colo. Their research confirms that findings about the genetics of the analogous receptor in mouse cells, described by Mark M. Davis and colleagues at Stanford University in the Nov. 1 NATURE, also hold true for humans.

B cells, another important class of immune system coordinators, use a more straightforward method of recognizing foreign substances that is better understood than the recognition process in T cells. If a molecule on the surface of a virus or other invader fits like a key in the receptor or "lock" on the B cell surface, the B cell is immediately activated to fight the substance. In contrast, most T cells must simultaneously be presented with not only the "foreign" molecule but also a contrasting representation of "self." The molecules that signal "self" on cells throughout the body are known as major histocompatibility complex (MHC) antigens. They vary greatly among unrelated individuals and may play an important role in the rejection of a transplanted organ.

A central question, Sim says, that could soon become clear with the deepening understanding of the T cell receptor, is whether the cell uses different parts of the same receptor to recognize self and nonself, or two distinct receptors.

— *D. Franklin*

Picking ancient brains

Archaeologists at Florida State University in Tallahassee announced Dec. 14 that they found two 7,000-year-old skulls containing "well preserved and complete human brains" in a swampy area about 15 miles west of the shuttle launch pad at Kennedy Space Center in Cape Canaveral. Laboratory analysis determined that the brain matter still contains DNA, making these "by far the oldest brains ever found from which we have been able to extract DNA [for analysis]," says Florida State anthropologist Glen H. Doran. The skulls were found at a subdivision development where other human skeletons from around 5000 B.C. have been unearthed. The brains were preserved at a depth of about 10 to 12 feet in a small pond burial site that was heavily charged with mineral water, says Doran. □