

was agreed that ALG should be given to all future heart transplant recipients.

Lymphocytes are white blood cells which play a central role in rejection reactions. Such reactions are a form of the mechanism of immunity with which the body fights disease organisms. Lymphocytes collect and multiply around foreign tissue, eventually infiltrating it and, it is generally believed, destroying it.

**Measures used to fight this reaction** in the first heart transplants consisted of drugs such as the steroid, prednisone and Imuran. These drugs suppressed not only the lymphocytes, but all of the immune response. Thus the patients lay in danger of massive infection by foreign organisms. The first recipient, Louis Washkansky, died of infection.

What is needed, therefore, is something that will suppress lymphocytes but leave the rest of the immune mechanism alone. This ALG does. It is produced by injecting human lymphocytes into horses.

The horses react with their own immune response to the foreign human cells, producing antibodies (globulin)

which destroy these invading cells.

Some of the horse's blood is withdrawn when this antibody production is at its peak. The globulin is isolated and injected into patients, where it continues with its work of destroying lymphocytes. It is highly selective and won't bother any other cells.

**ALG has been used** in kidney and liver transplants, also with some apparent success. It might be an answer, or at least a substantial part of the answer, to the problem of rejection that plagues all forms of transplants. But it is hard to evaluate ALG when it is only part of a shotgun therapy that includes everything from "steroids to prayer," as one immunologist puts it.

Furthermore, no one knows the effect of long-term suppression of lymphocytes, which presumably play a part in battling infections as well. And studies in Holland indicate that different batches of ALG may have different effects on the retention of grafts in animals.

Even so, ALG appears to have improved the heart transplant batting average. ◇

ing to rely on old state hospitals for inpatient beds—a situation which hampers innovative therapy.

Treating the bulk of the nation's mental inpatients—about one million a year—at home would circumvent this problem to a great extent.

Departure from traditional hospital practice, however, is likely to be spotty.

The National Institute of Mental Health, which funds the new community mental health centers, does not directly establish treatment methods. But as applications for new grants come in, the NIMH can decide to fund those using the latest techniques. Dr. James Lieberman, chief of the center for studies in child and family mental health, calls the Denver work very promising. He says he does not think the principle of home therapy needs further support before it can be widely implemented. NIMH is not likely to fund those applicants who are unaware of the latest research, he says.

**Some patients**, however, must be hospitalized if only because they lack a family. Dr. Langsley believes that "anyone who would ordinarily be put in the hospital and has a family willing to participate in therapy can be treated at home." The criterion, he says, is not how severe the patient's symptoms are, but how much family support he has.

Some of the most difficult patients to handle are those with prior hospital experience, adds Dr. Langsley. Their resistance to home treatment is only surpassed by the resistance of their families.

## GRANTS

### Congress waves the cane

Rebellious college students still face an angry Congress—and an especially angry House of Representatives.

When Congressional anger flared last May in response to riots on several campuses (SN: 5/25, p. 493), there were predictions that, given time, less stringent second thoughts would prevail. Recently, in amending the Higher Education Amendments Act, the House showed that its second thought was as harsh as its first.

In the bill, as the Senate had earlier passed it and as the House Education and Labor Committee recommended it, was a provision that gave colleges and universities authority to withhold Federal funds from students who, in the judgment of university authorities, "willfully refused to obey lawful regulations or orders. . . ." This was a softening of earlier language on the matter which the committee thought the House would now accept.

But on the floor, Representative William J. Scherle (R-Iowa) offered an

## MENTAL ILLNESS

### Treatment goes home

"Mamma has gone crazy again—she's schizophrenic you know." And into the hospital goes mamma where she stays until the acute phase of her illness has passed, usually a matter of weeks.

One goal of modern psychiatry is to make that stay in the hospital as short as possible. The harmful impact of long-term hospitalization has been well established over the past decade, and since mental illness is not a constant condition, but episodic, patients can be kept home and functioning most of the time.

**Now it appears** that the bulk of mental patients need never go to the hospital at all, even during acute bouts of hallucinations and delusions.

Schizophrenia is no longer an excuse for hospitalization. Nor is the severity of symptoms alone in most cases a sufficient reason for the patient or his family to fall back on hospital care.

Some leaders in mental health have suspected that home treatment was as good and perhaps better than hospitalization, but until recently they have lacked solid evidence.

The first scientific validation came last year when a New York study of 55 schizophrenics indicated that three-fourths of them could be kept out of the hospital altogether with drugs and simple supportive therapy from visiting nurses.

The home treatment did not delay hospitalization, but replaced it. Affir-

mation of this principle on a broader scale now comes from a Denver study still in progress.

The Denver investigators at the University Medical Center, led by Dr. Donald Langsley, stopped 150 patients at the point of hospital entry and returned them home for a type of family crisis therapy.

The patients, pulled out on a random basis, included a full range of mental illnesses, from suicidal depressives to hallucinating schizophrenics. All were candidates for the hospital and all were successfully treated at home with members of the family participating.

About 20 percent of the first 75 treated in this manner eventually entered the hospital over a six months period. But the re-admission rate for hospital treated patients was the same, and they stayed longer. Those initially treated at home spent only a third as much time in the hospital as the others, indicating for the first time that home therapy may actually be preferable to hospitalization for even the most severely mentally ill.

**This kind of evidence** is expected to have major impact on the field of mental health. Community centers are experimenting with a wide range of treatment modes, from crisis intervention to day-hospitals and home care. There is a good deal of confusion over which patients to hospitalize and for how long. Some of the new centers are hav-