physicians, especially in the nationalized hospitals, have the time to bestow. But if this principle is carried out, and the patient gradually re-educated, the results can be remarkable.—I am, etc.,

T. L. CLEAVE.

Priorities in Mental Care

Sir,—With the recent furore over mental institutions and the desperate need both to modernize present mental hospitals and to build new ones, I feel that one essential problem should not be overlooked.

Intensification of social problems related to growth of populations, increasing urbanization, industrialization, and automation, war and epidemics, situations around racial conflicts and desegregation, and unemployment have had a serious and frequently devastating impact on the family. Initially, communities with over-optimistic expectations turned to psychiatrists for solutions to juvenile delinquency, school dropouts, drug addicts, the mounting number of illegitimate births, and other manifestations of social disorganization.

This wave of facile optimism has passed temporarily, leaving the serious problem of where and how medical and psychiatric skills can be used most strategically to solve complex community problems.

Though new hospitals will inevitably be a boon in the management of psychiatric patients, the present mental units, the family, will need the integration of the multiple skills of the teacher, social worker, psychologist, public health administrators, and psychiatrists. It is these one feels ought to be encouraged and trained simultaneously, if not before, new mental hospitals are completed.—I am, etc.

S. K. GOOLAMALI.

Metropolitan Hospital, London E.8.

Myocardial Infarction after Surgery

Sir,—Dr. P. R. Hunter and others (21 December 1968, p. 725) in a study of the incidence of myocardial infarction following surgical operations have commented on the increased levels in the serum of folic acid.

The incidence of raised L.D.H. levels after surgical procedures was related to the type of surgical procedure performed, and a moderate postoperative rise was common when the field of operation was in the abdomen or pelvis. They also state that, in the presence of equivocal electrocardiographic changes, a confident diagnosis of postoperative myocardial infarction can often be made based on serum aspartate aminotransferase (S.G.O.T.), L.D.H., and L.D.H. iso-enzyme patterns.

We have also been interested in this problem and have measured serum L.D.H. levels in the postoperative period for 10 consecutive days in 29 patients. As the electrophoretic, chromatographic, and immunologic methods of separation of L.D.H. iso-enzymes are generally too cumbersome for the average hospital laboratory, we have used a simpler procedure. The L.D.H. level of the serum was assayed, the serum placed in a water bath at 60° C. for 30 minutes and the L.D.H. level assayed again. The second assay value was called the "heat stable" L.D.H. and closely correlates with L.D.H.1, the iso-enzymes which are raised in myocardial infarction.

It was found that there was no significant difference (P>0.05) from preoperative serum levels of L.D.H. or "heat stable" L.D.H. in patients who underwent surgical operation without concomitant blood transfusion. However, in patients who had transfusion of blood in the perioperative period there was a significant (P<0.05) elevation of total L.D.H. on the second and tenth postoperative days, and of "heat stable" L.D.H. on the second, third, and tenth postoperative days. We also found that L.D.H. levels from blood haemolysed at the time of sampling were abnormally high, and in one patient who had an intravascular post-transfusion haemolytic reaction both total L.D.H. and "heat stable" L.D.H. levels rose markedly. Serum L.D.H. is raised in cases of haemolytic anaemia.1

It is suggested, therefore, that the measurement of serum L.D.H. and "heat stable" L.D.H. in the postoperative period is of use in the diagnosis of myocardial damage provided that the patient has not received a blood transfusion and erythrocyte haemolysis has been avoided. The relation between L.D.H. levels and type of surgery described by Dr. Hunter and others may thus be incorrect, as blood transfusion in the perioperative period was not considered, and the administration of blood during abdominal and pelvis surgery is not uncommon.—We are, etc.,

SYDNEY NADE.
C. S. B. GALASKO.
C. RICHMOND.

Hammermith Hospital,
London W.12.

REFERENCES
1 Bell, R. L., American Journal of Clinical Pathology, 1963, 40, 216.
4 ROBERT SAVAGE.

Adenoeplithelioma of the Cervix

Sir,—Adenoeplithelioma is a mixed carcinoma of the cervix containing both squamous and adenomatous elements. It responds less well to therapy than the pure squamous counterpart. In the course of a special study of these lesions carried out between 1958 and 1961 it became obvious that a non-clinical (that is, preinvasive and non-clinical invasive carcinoma) could be recognized.

During that period 298 clinical carcinomas of the cervix were admitted and 37 (12%) were found to be adenoeplitheliomas. In the same period 122 cases of preinvasive cancer, all discovered by vaginal cytology, were admitted and 14 (11%) were adenoeplitheliomas. Follow-up is now complete and covers a period of eight to ten years following treatment. A comparison of the results of the clinical and non-clinical forms of this disease shows the value of early diagnosis.

Clinical Adenoeplithelioma

<table>
<thead>
<tr>
<th>Method of Treatment</th>
<th>Radiotherapy Only</th>
<th>Surgery Only</th>
<th>Modified Radiation or Radical Surgery</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dead Alive 5 years</td>
<td>13</td>
<td>2</td>
<td>7</td>
<td>22</td>
</tr>
</tbody>
</table>

The overall survival rate for this group is 40%. For those treated purely by radiation it is 13%, and for those treated by modified radiation followed by radical surgery the five-year cure rate is 63%. It is interesting also to note that there were five cases only of stage 4 tumours. One was too advanced for any treatment, and one was treated by radiotherapy only and died in three months. There were two treated by modified surgery and one died by pelvic exenteration. Two of these still survive, and the other died at four years from a cerebral haemorrhage without recurrence.

There were 14 cases with no clinical evidence of disease, and all were cured by vaginal cytology. Ten of these were non-invasive on histological examination and four were frankly invasive though they had no signs or symptoms of the disease.

All these patients are still living. Ten were treated by modified radical hysterectomy. Of the four cases (all preinvasive) treated conservatively (cone biopsy), two had a successful pregnancy since treatment, though one of these has subsequently undergone hysterectomy for a recurrence of the lesion.

Finally, it is of interest to note that the youngest patient in each group was only 22. The 22-year-old in the clinical group had a stage three tumour treated by radiation and died of cancer four months later. The 22-year-old in the non-clinical group was treated by cone biopsy, since he had had a further successful pregnancy, and remains well.—I am, etc.,

STANLEY WAY.

Gynaeological Research Department, Queen Elizabeth Hospital, Gateshead.

Paroxysmal Nocturnal Haemoglobinuria and Leukaemia

Sir,—Your leading article (30 August, p. 483) draws attention again to paroxysmal nocturnal haemoglobinuria (P.N.H.) and connections with leukaemia and the myeloproliferative disorders. While studying the lysis of P.N.H. cells in solutions of low ionic strength Dr. F. Stratton and I also tested cells from patients with some of these diseases with a screening test for P.N.H. as you suggest. One out of three patients with acute myeloid leukaemia had a weakly positive test. Of greater interest was the fact that three out of these three cases of myelosclerosis gave a more strongly positive result. In an attempt to elucidate this we measured the levels of red cell acetylcholinesterase (AChE) in these and other blood disorders. This enzyme is known to be low in P.N.H.4 The expected