staff are often heavily committed the day before an operating day and that by "admitting" a patient two to three days before they come into hospital the week's work load can be more conveniently staggered. However, this local advantage does not justify the concept of preadmission clinics in general.

We think that a more efficient use of hospital facilities would result from planned admissions with a short waiting list. It is then possible to do simple screening tests in the primary outpatient consultation clinic and to practise outpatient surgery in suitable cases.—We are, etc.,

J. ALEXANDER WILLIAMS
J. M. YATES

The General Hospital,
Birmingham

Au Antigen and Antibody in Cord and Maternal Serum

SIR,—It has not yet been clarified whether female carriers of the Australian antigen (Au) can transmit it to their offspring by the transplacental route. However, such an event must be uncommon as only rarely can Au be demonstrated in cord serum by conventional immunoelectro-diffusion techniques. Skinhoj and colleagues¹ could not find antigen or antibody in the cord serum of 52 children born of Au positive mothers though other workers have occasionally found Au in cord serum^{2,3} usually in association with viral hepatitis occurring in pregnancy. Au antibody has not been described in cord sera.

In Papua, New Guinea, the incidence of Au carriers in a normal blood donor population varies between 8 and 25% with a mean of 7.5%, as assessed by an immunoelectro-osmophoresis technique.⁴ Levels of Au antibody are also high, ranging between 20 and 50% of all sera, as measured by a passive haemagglutination assay with Au-coated red cells.⁵ In a continuing investigation we have now studied both Au antigen and antibody in 73 paired samples of cord and maternal serum from normal pregnancies using the above techniques. The results for Au antibody are given in the Table.

Au Antibody in Cord Serum		Au Antibody in Maternal Serum	Number of Paired Samples
+	=	+	15
+	<	+	6
+	>	+	8
+		0	1*
0		+	2*
0		0	41

* Low Titre

These findings indicate that an appreciable percentage of babies born in Papua, New Guinea, have detectable levels of Au antibody in cord serum. Using a paired comparison test there was no significant difference between the titres of Au antibody in the maternal and cord serum, and it is therefore probable that the antibody was derived from the mother by passive transfer. A low-titre Au antibody was detected in one cord serum without antibody or antigen in the mother. This may represent a fetal response to either transplacental transmission of antigen occur-

ing during pregnancy, or antibody derived from the mother as a result of a transient exposure to the hepatitis virus. On the other hand, it may simply reflect technical difficulties in assessing very low levels of Au antibody by this test method.

Au antigen was not detected in any sample of cord serum. However, this does not completely exclude the presence of Au, as more sensitive techniques may be required to detect the antigen. In the four mothers who were positive for Au antigen both antigen and antibody were absent from the cord serum. This finding as well as those from other workers¹ could provide further evidence against transplacental transmission of Au in normal pregnancy.

Au-coated cells for the passive haemagglutination assay were supplied by Dr. K. Okochi, of Tokyo University.—I am, etc.,

D. G. WOODFIELD

Red Cross Blood Transfusion Service,
Boroko, Papua, New Guinea

- 1 Skinhoj, P., Sardemann, H., Chon, J., Mikkelsen, M., and Olesen, H., *American Journal of Diseases of Children*, 1972, 123, 380.
- 2 Keyes, T. S., Hewitt, W. L., Sever, J. L., and Gitnick, G. L., *Gastroenterology*, 1971, 60, 683.
- 3 Schweitzer, I. L., Wing, A., McPeak, C., and Spears, R. L., *Journal of the American Medical Association*, 1972, 220, 1092.
- 4 Woodfield, D. G., Oraka, R., and Nelson, M., *Medical Journal of Australia*, in press.
- 5 Woodfield, D. G., unpublished data.

Propranolol in Renal Failure

SIR,—We read the article by Dr. F. D. Thompson and others (20 May, p. 434) on the pharmacodynamics of propranolol in patients with renal failure. We should like to report on our experience using propranolol in eight patients with renal failure and resistant hypertension. The basic data are given in the Table.

Patients 1, 4, and 8 had malignant hypertension with renal failure. Patients 2, 5, and 7 had functioning cadaveric renal transplants. Patient 3 had chronic interstitial nephritis, and patient 6 polycystic kidneys and renal arterial stenosis. Good control of blood pressure had not been obtained using combinations of diuretics, methyl dopa, hydralazine, bethanidine, and guanethidine. Propranolol, three or four doses daily, was added and an eye kept open for signs of left ventricular failure. Most patients received digitalis in modified doses. Blood pressure readings (see Table) were taken with the patients in the recumbent position except in patients 3 and 4, whose blood pressure was recorded sitting. The readings are mean values of several readings on different occasions.

Two patients died in renal failure with oliguria and terminal signs of left ventricular failure. One of these (patient 8) had rapidly progressing renal failure. The renal

biopsy finding was consistent with malignant hypertension. Patient 1 had malignant hypertension also. He had been on propranolol since October 1970, and the creatinine clearances shown in the Table were in October 1970, October 1971, and May 1972. Beta-adrenergic blockade possibly modified the terminal phase in these two patients.

The blood pressure of four patients has been better controlled since they have been taking propranolol and in two it has been possible to reduce the dose of other drugs. We think that propranolol or some other beta-adrenergic blocking agent should be given a trial in the treatment of hypertension in patients with fairly stable renal failure. In rapidly progressing disease the use of these drugs is probably hazardous—We are, etc.,

PER FRANZEN
AMOS PASTERNAK

University Central Hospital,
Helsinki, Finland

Rosette Inhibition Test in Management of Transplantations

SIR,—We were interested to read the article on further assessment of rosette inhibition test in clinical organ transplantation by Mr. M. Bewick and others (26 August, p. 491). We have used the test for the past two years in an attempt to improve the management of acute rejection episodes in renal transplant patients. Our researches have confirmed the previously reported findings of raised rosette inhibition titres with immunosuppression.¹

The test, however, has posed several problems. Firstly, the titre difference between immunosuppressed patients and normal individuals in our series is on average two dilutions of antilymphocyte globulin. From the examples quoted in the article this would also appear to be the experience of Mr. Bewick's group. In standard biological practice with doubling dilution tests one dilution either way is accepted as the level of experimental error and a four-fold alteration in titre as a significant result. We have attempted to improve the accuracy of the test by an investigation of the variables involved. The antilymphocyte globulin is the most crucial of these, and as a biological product it is difficult to standardize and tends to deteriorate with time.²

Detailed results of our investigations are in preparation. We have not been able to show any clear correlation between a clinical predisposition to rejection and the level of the rosette inhibition titre. It would be interesting to know if Mr. Bewick's further studies have confirmed the predictive value of the test in acute rejection episodes previously reported.¹

In our series of 33 renal transplant patients

Patient	Sex and Age	Creatinine Clearance (ml/min)	Period of Observation (Months)	Maximum Dose (mg/24 hr)	Blood Pressure (mm Hg)	
					Before Propranolol	After Propranolol
1	Male 58	{ 39 (Oct. 1970) 10 (Oct. 1970) 3 (May 1972)	20	320	245/150	200/130
2	Female 46	24	11	120	193/133	168/110
3	Male 47	30	8	60	190/125	158/108
4	Female 38	53	4	160	230/135	190/115
5	Male 33	28	4	240	190/113	193/122
6	Male 44	9	3	120	200/147	160/112
7	Male 43	37	2	180	230/147	212/140
8	Male 53	15	1	240	186/110	218/125