receiving treatment with kanamycin. It is anticipated that further development will ultimately produce a programme which will predict serum kanamycin concentrations with greater consistency and which will be suitable for routine clinical use.

TABLE 1. Serum concentrations (µg/ml) of kanamycin in hospital patients receiving treatment (a) as predicted by the computer (b) as determined by microbiological assay

	Body weight			Serum kanamycin concentration (µg/ml)			
		Renal clarance ml/min		2 h after previous dose		12 h after previous dose	
Patient	(kg)	Urea	Creatinine	(a)	(b)	(a)	(b)
1	63	15.2	34.6	27	26	9	7
2	46	10.5	15.0	42	12	1	2
3	60	7.5	25.4	32	27	14	15
				33	25	16	16
4	53	1.6	2.2	49	35	38	22
5	63	0.7	1.0	38	22	29	15

Dr. B. R. Knowles received a Wellcome Scholarship in Clinical Pharmacology.

REFERENCES

Orme, B. M. & Cutler, R. E. (1969). The relationship between kanamycin pharmacokinetics: Distribution and renal function. *Clin. Pharmac. Ther.*, 10, 543-550.

Welch, H., Wright, W. W., Weinsfein, H. I. & Staffa, A. W. (1958). *In vitro* and pharmacological

welch, H., Wright, W. W., Weinsfein, H. I. & Staffa, A. W. (1958). In vitro and pharmacole studies with kanamycin. Ann. N.Y. Acad. Sci., 76, 66–80.

GARROD, L. P. & O'GRADY, F. (1971). In: Antibiotics and Chemotherapy, 3rd edit., p. 477. Edinburgh and London: Livingstone.

Pressure reversal of anaesthesia (T)

K. W. MILLER, W. D. M. PATON, E. B. SMITH and R. A. SMITH Department of Pharmacology, South Parks Road, Oxford OX1 3QT

Effect of general anaesthetics on the permeability of single bilayer phospholipid vesicles and the antagonism of high pressure (T)

SHEENA JOHNSON and K. W. MILLER

Department of Pharmacology, South Parks Road, Oxford, OX1 3QT

Pharmacology of cannabis: catalepsy: hypothermia: inhibition of drug metabolism (T)

W. D. M. PATON and R. G. PERTWEE

Department of Pharmacology, South Parks Road, Oxford OX1 3QT