

tral Public Health Laboratory, Colindale Avenue, London N.W.9 5HT phone 01-205-7041.

In Scotland similar immunoglobulin is prepared at the Protein Fractionation Centre and can be obtained by contacting the director of the appropriate regional blood transfusion centre who will also provide information regarding the local follow-up arrangements for the recipient.—I am, etc.,

D. N. S. KERR

on behalf of the Medical Research Council Working Party on Specific Immunoglobulin for Serum Hepatitis

Department of Medicine,
University of Newcastle upon Tyne

- 1 Cossart, Y. E., *Proceedings of the European Dialysis and Transplant Association* 1972, 9, 235.
- 2 Krugman, S., Giles, I. P., and Hammond, J., *Journal of the American Medical Association* 1971, 218, 1665.
- 3 Soulier, J.-P., Couroucé-Pauty, A.-M., and Benamon-Djiane, D., *Revue Française de Transfusion*, 1972, 15, 377.

Hazards of Laparoscopy

SIR,—I should like to refer to the mode of introduction of the pneumoperitoneum needle. It is this part of the operation which registrars find most difficult and why we suggested (30 June, p. 773) a different site for insertion in the *unexceptional* case. I have the greatest admiration and respect for Mr. Patrick Steptoe (11 August, p. 347) but respectfully suggest that a technique which is easier to learn is likely to be safer as far as surgical trainees are concerned. In Winchester we have found that registrars find it easier to learn the technique of inserting the needle about half-way between the symphysis pubis and the umbilicus. The operator's left hand tenses the abdominal skin while palpating the sacral promontory. The needle "plunges" into the hollow of the pelvis with a distinctive feel. It is, of course, essential that the patient is in the Trendelenburg position and that an assistant holds the Spackman's cannula in such a way as to avert the uterus as far as possible. This method is contraindicated in patients with a pelvic tumour, when a technique such as described by Mr. Steptoe is preferred.

This method is quite different from the standard technique because the abdominal wall is not lifted away from the posterior abdominal wall and relies for its safety in directing the needle into the pelvic cavity. We find it useful to keep the pneumoperitoneum needle in situ; it can be used to display the pelvic viscera or aspirate cysts and often avoids the need to insert another trocar and cannula. Since adopting this technique (which is not unique to Winchester) we have had no laparoscopy failures. The uterus has been punctured three times in about 200 operations but with no sequelae.

Trainees need to be taught the several means of introducing the pneumoperitoneum needle and, like Kejjland's forceps, this means tuition by the expert.—I am, etc.,

A. D. NOBLE

Royal Hampshire County Hospital,
Winchester

Depression and Organic Disorder

SIR,—I would agree with Dr. W. Sircus (1 September, p. 480) that it is important to

consider a lurking neoplasm or indeed any lurking organic disorder as an aetiological factor in a depressive illness occurring for the first time in a man over 70 years of age. However, he is over-stating his case when he suggests that the depression in the case presented should have alerted the clinicians, there being at least three other possible causes of a depressive illness in this instance.

Firstly, the patient was reported as being ostensibly depressed following the sudden accidental death of his grandson six months before. A prolonged bereavement reaction cannot be ruled out. Secondly, he was noted to be depressed four years after his first consultation. During this time he had been receiving that well-known depressant of both blood pressure and mood alpha-methyl dopa. Thirdly, over the following months the patient had almost continuous abdominal pain unrelieved by medical treatment. He had numerous and repeated investigations, including biopsies and endoscopies. At one point after almost dying from a haematemesis and developing a urinary tract infection he went into urinary retention as a result of his antidepressant medication. Thereafter he had chest pain, dyspnoea, haematemesis, and haemoptysis. It is then said that "during the next 10 days depression was the most striking feature." Might I venture to suggest that any other mood would have been highly unusual considering what he had endured?

Finally, while Dr. Sircus and I agree on the importance of being suspicious of such a depression I note that in Mr. A. N. Smith's table of 11 symptoms occurring in carcinoma of pancreas nowhere is there any mention of depression.—I am, etc.,

GEORGE DODDS

Ross Clinic,
Aberdeen

Protection of Cytomegalovirus-infected Cells by IgG Antibody

SIR,—You recently published a letter (12 May, p. 364) from this laboratory recording the immunological destruction in vitro of cytomegalovirus (C.M.V.)-infected cells. We have recently repeated these experiments with the same ground squirrel cell cultures infected with C.M.V. and by means of the same laboratory techniques, but using in addition pooled ground squirrel sera reactive in the complement fixation test and also its IgG fraction separated by rivanol (ethacridine) treatment¹ and checked by immunodiffusion tests performed with anti-ground-squirrel-protein serum produced in rabbits. The results revealed that antibodies of the IgG class do not lyse C.M.V. inclusion cells in the presence of fresh guinea-pig serum referred to as complement (C'). Moreover, when monolayers treated with 20% IgG were washed and exposed to positive serum in the presence of complement, lysis of C.M.V.-infected cells required an incubation time 2-6 hours longer than in control cultures not treated with IgG. Control tests were also performed omitting either the antibody or the complement.

Our findings indicate that the major portion of antibody activity against C.M.V. inclusion cells lies in the IgM fraction. On the other hand, the delay of cell lysis caused

by IgG antibodies suggests that the antigenic sites on the cell surface are far apart and that bridging of attached IgG molecules is not possible. Hence there is no lysis, but IgG molecules are temporarily blocking all the antigenic determinants. Such blocking effect of IgG molecules has also been observed in the course of C.M.V. immunofluorescence tests.² Thus an imbalance of the relative amounts of different classes of immunoglobulins may protect C.M.V. inclusion cells against the lytic action of IgM antibody.

These results obtained with the ground squirrel C.M.V. model are not necessarily pertinent with respect to human C.M.V. disease. Two facts should be remembered, however. First, the human newborn receives IgG from his mother as almost the exclusive immunoglobulin, and it fails to confer on him effective protection³ against the appearance of C.M.V. inclusion cells in various tissues and organs and the associated severe clinical symptoms emerging during congenital disease. Secondly, commercial gammaglobulin preparations which provide only IgG in appreciable amounts and practically no IgM,² were widely used during the 1950s and proved therapeutically ineffective.⁴—We are, etc.,

PETER DIOSI
GEORGETA HERZOG

Timisoara, România

- 1 Horejsi, J., and Smetana, R., *Acta Medica Scandinavica*, 1956, 155, 65.
- 2 Schmitz, H., and Haas, R., *Archiv für Gesamte Virusforschung*, 1972, 37, 131.
- 3 Weller, T. H., *Journal of Infectious Diseases*, 1970, 122, 532.
- 4 Hanshaw, J. B., *Journal of Infectious Diseases*, 1971, 123, 555.

Endotoxic Shock Complicating Transhepatic Cholangiography

SIR,—I read the article by Mr. M. R. B. Keighly and others (21 July, p. 147) with considerable interest though I could not but wonder what the indication was for the extensive investigations recorded, the last of which unfortunately resulted in the patient's death, when it would appear from reading the article that a simple laparotomy would have established the diagnosis and facilitated the immediate treatment.—I am, etc.,

B. BRENDAN HICKEY

Surgical Department,
Singleton Hospital,
Swansea

Antibiotic-induced Meningitis

SIR,—The leading article "Antibiotic-induced Meningitis" (18 August, p. 336) creates mysteries where none exist. The initial misconception is in the first paragraph where it is stated that "it is a novel idea that a fresh infection arising during treatment should be caused by a sensitive organism and should involve the meninges." Review of the eight cases cited,¹⁻⁴ shows that adequate information is available for six. In each of these there is ample evidence to support the view that meningitis was an extension of a primary infection situated outside the central nervous system. In each there was conclusive evidence of blood-borne infection. In each the meningeal infection was apparently caused by the same organism