thane were found to have a similar action.² It is not surprising that latent viral infections such as herpes simplex, herpes zoster and varicella, infectious mononucleosis, lymphocytic choriomeningitis, Coxsackie infections, and "hospital" or viral hepatitis may become obvious after anaesthesia and surgical stress.⁵ Viral hepatitis is presently causing confusion among physicians because it cannot be diagnosed with serological accuracy. The other viral infections have characteristic appearances and are accepted by anaesthetists and surgeons as unavoidable hazards, like viral hepatitis after blood transfusion.

Anaesthetists cannot be expected to diagnose preoperatively the presence of latent viral infections in their patients. A patient's recent contact with other patients with infectious hepatitis may indicate the possibility of the appearance of jaundice soon after surgery.⁶ Patients with recurrent viral hepatitis present a serious problem because there is no anaesthetic technique which can be regarded as safe in these circumstances. The most that anaesthetists can do as far as postoperative hepatitis is concerned, is to make sure they avoid the sad fate of the physician from New Jersey.¹-I am, etc.,

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- Dougherty, W. J., and Altman, R., American Journal of Medicine, 1962, 32, 704.
 Humphrey, L. J., Wingard, D. W., and Lang, R., Surgery, 1969, 65, 939, and 946.
 Rubin, G., Journal of Infectious Diseases, 1904, I, 425.
 Graham, E. A., Journal of the American Medical Association, 1910, 54, 1043.
 Park, S. K., Brody, J. I., Wallace, H. A., and Blakemore, W. S., Lancet, 1971, 1, 53.
 Hege, M. J. D., Anesthesiology, 1970, 32, 170.

Treatment of Anaphylactic Shock

SIR,-In the Therapeutic Conference on Drug Allergy¹ (3 April, p. 37) there was a discussion concerning the specificity of antihistamines and corticosteroids in acute anaphylactic shock. The Aberdeen speakers, contrary to the interpretation of Drs. M. W. Greaves and G. Holti in their letter (15 May, p. 398) did not suggest that an antihistamine antagonized all of the effects of the mediators, nor that an antihistamine "ensured recovery," or that corticosteroids were "useless." Indeed, as Dr. L. Stankler clearly stated, they feel that steroids are indicated because of beneficial non-specific actions and are widely used, as in our patient. -I am. etc.,

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Management of Aortic Aneurysms

SIR,-While many surgeons will welcome your timely leading article on the subject of aortic aneurysms (20 March, p. 623) and agree with the majority of your recommendations some, in addition to ourselves, will almost certainly disagree with your proposals for the management of ruptured aneurysms. We simply cannot accept your statement that "... if he is hypotensive the aneurysm is likely to be ruptured, and it is better to operate on the spot even though his general condition improves with blood replacement."

No data are provided for the support of this statement, but our objection to it is based on our experience of 102 aorto-iliac resections for acute aneurysmal disease, with an overall mortality rate of 39%. In 91 instances frank rupture of the aneurysm had occurred with the formation of a large retroperitoneal haematoma and often there was free blood present in the peritoneal cavity also. The series contains three cases of ruptured aneurysm of the suprarenal aorta and three cases of ruptured iliac aneurysm. The mortality rate for these 91 patients was 40.6% which includes all late deaths from technical problems and those from postoperative cardiac, respiratory, and renal failure, even when these occurred weeks or months later.

The majority of these patients were transferred to our hospital from other centres. In several instances the diagnosis had been established by exploratory laparotomy in another hospital prior to transfer here, and all these patients survived the subsequent aortic resection although a few died later from diverse complications. Many of the patients survived transfer from hospitals 50 miles (80 km) or more away, and in a few instances the distance involved was 100 miles (160 km) or more. One patient was transferred by air from Malta, following an exploratory laparotomy there; he survived the subsequent aortic resection but unfortunately died some weeks later from combined renal and cardiorespiratory failure. In the entire series only six patients died in the operating theatre and most of the fatal cases survived for periods of days, weeks, or even months before eventually succumbing.

During the first three months of this year seven ruptured aortic aneurysms were admitted to the vascular unit of this hospital and in five of these the diagnosis was made in another hospital, the remaining two patients being admitted direct from general practitioners. The distance travelled varied from 8 to 38 miles (12-56 km) and the time between the onset of leakage and operation varied from 8 hours to 144 hours. No patient died in transit despite the presence of severe hypotension in five, and all were operated on successfully. Two patients died in the postoperative period, one from bronchopneumonia and one several weeks later from septicaemia and renal failure.

While we accept, of course, that there will always be the exception to the rule, we are nevertheless convinced that the majority of patients with a ruptured aortic aneurysm, even when hypotensive, will survive transfer to a unit with special expertise in this field. Our results, which compare favourably with any series of comparable size yet published in the world literature, indicate that 60% of these otherwise doomed patients can be saved. To achieve this, however, requires considerable experience, devoted team work at all levels, and the facilities of a wide range of ancillary services. Our results clearly demonstrate that the majority of the patients who succumb in the postoperative period do so not from technical complications, but from the metabolic consequences of cardiac, respiratory, and renal failure. Some of these, but not all, can be averted, for the majority of these patients require skilled nursing and postoperative care in an intensive care unit where facilities for respiratory, cardiac, and renal support are also available. Should this not be the case patients will continue to die despite a technically successful operation.

We sincerely believe that the best results cannot be achieved if your recommendations are followed and we fear the consequences may be disastrous if they are.-We are, etc.,

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Disposable Vein Strippers

SIR,-Disposable plastic vein strippers are pre-packed and sterile now available (Ethicon Ltd.). The pack contains two stripper lengths, three olive ends of varying sizes, and a handle. The four end pieces are interchangeable. These strippers have proved most useful as they are immediately available for use, infection risk is negligible, and no time or labour is spent on cleaning the stripper.



Overall they compare well with the metal stripper in function. The rigidity of the plastic stripper usually allows it to pass more easily and smoothly up a vein than a metal one, although with the latter the natural resilience can be advantageous over the plastic stripper as by manipulation it can often be made to pass some tortuous point.

The largest olive end in the pack is bigger than required and it would be better if this were replaced by a second mediumsized one. The pack is sufficient for the requirements of stripping the varicose veins of one leg and unless the veins are particularly bad the set will be sufficient for both sides. -I am, etc.,

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Technique of Vasectomy

SIR,-In their paper on male sterilization (31 October, p. 295) Dr. Pauline Jackson and her colleagues report upon their experience with 300 vasectomies. In my view the surgical technique which they employ is unnecessarily mutilating. They state that vasectomy "had to be regarded as irreversible". However, if vasectomy is done properly it can be significantly reversible (80%). To be reversible, the vas deferens should not be resected. Resection of the vas as described by Dr. Jackson and colleagues is done in an attempt to ensure surgical success, but in my view this procedure is unnecessary to secure male sterilization.

I have found that the optimum method of securing closure of the cut ends of the vas is to fulgurize these ends. The mucosa and submucosa are destroyed for 2-3 mm by inserting a needle electrode into the lumen of