

when possible. The local reaction might or might not recur after a full dose of antitoxin, and if it did the chance that it might be more severe, considering the balance of risks, than an attack of tetanus must be taken into account. It is recommended¹ that if there is no general reaction to a test-dose of antitoxin the full dose may be given, say, within half an hour. This may involve the risk of a variable amount of serum sickness, which is uncomfortable but not serious, and this must be weighed against the possibility of tetanus.

REFERENCE

- ¹ Parish, H. J., and Cannon, D. A., *Antisera, Toxoids, Vaccines, and Tuberculin*, 5th ed., 1961. Livingstone, Edinburgh and London.

Corticosteroid Therapy and Smallpox Vaccination

Q.—Should patients on cortisone therapy be vaccinated against smallpox?

A.—There is no very clear evidence that cortisone therapy is a contraindication to smallpox vaccination. The reason for this is the difficulty in differentiating between the effects of the steroid and those of the underlying disease for which cortisone has been administered. There have been several reports of deaths from varicella infection in children who were on cortisone therapy, but Finkel¹ thinks that such deaths are more likely to be due to the effects on immune mechanisms by underlying disease rather than by the administered adrenocorticosteroids. Nevertheless, some authorities² consider it wise to reduce rapidly, and when possible discontinue, cortisone therapy in children exposed to varicella. There have not been many reports of trouble after exposure to the vaccinia virus. Olansky *et al.*,³ however, reported a fatal case of generalized vaccinia after vaccination in an adult patient on cortisone therapy for chronic leukaemia; treatment with gamma globulin unexpectedly failed to improve her hypogammaglobulinaemia, and so it was assumed that the cortisone was responsible for the patient's inability to deal with the vaccinia virus. Most authorities therefore advise caution. Dixon⁴ puts it thus: "It has been suggested that patients undergoing steroid treatment may react unfavourably to vaccination, and it would appear prudent to consider the need for vaccination while such therapy is in progress." If there is a need for vaccination—e.g., of contacts of a case of smallpox, or of travellers to areas where smallpox is endemic—antivaccinal gamma globulin may be injected into the other arm at the time of vaccination. When there is no real need for vaccination it should not be performed.

REFERENCES

- ¹ Finkel, K. C., *Pediatrics*, 1961, **28**, 436.
² Haggerty, R. J., and Eley, R. C., *ibid.*, 1956, **18**, 160.
³ Olansky, S., Smith, J. G., and Hansen-Pruss, O. C. E., *J. Amer. med. Ass.*, 1956, **162**, 887.
⁴ Dixon, C. W., *Smallpox*, 1962. Churchill, London.

Chlorinating a Small Swimming-pool

Q.—What is the best chemical and in what quantity for treating a garden swimming-pool containing approximately 6,000 gallons used by five people with a weekly change of water?

A.—Small swimming-pools can be chlorinated by the manual addition of sodium hypochlorite (e.g., "chloros," "domestos," or "voxsan") to the water and stirring with a clean paddle to ensure even distribution. The manufacturers' instructions as to dosage, etc., should be followed in every case. Daily tests can be carried out with a simple colour-testing outfit, such as a Lovibond comparator or a "chlorotex" outfit, to ensure that the residual chlorine figure is between the limits of 0.2 to 1 part per million.

Since the pool is used by only five people and the water changed weekly I doubt whether chlorination is really necessary, provided, of course, that the water is obtained from a satisfactory source. I suggest that the local health department be asked to take a series of samples for bacteriological examination while the pool is in use and before any chlorination is started. The reports would indicate whether there was any need for routine chlorination.

Recurrence of Eclampsia

Q.—In August, 1957, a primagravida, then aged 19, developed acute eclampsia during labour. At no time during regular antenatal examinations were there any signs of toxæmia. She has remained well since discharge from hospital, and her blood-pressure, checked on various occasions, has always been within the range 120/70. She is now three months pregnant again, and her B.P. is 115/70. What are the chances of the same thing happening again, and what special precautions are indicated?

A.—Where good antenatal care is offered and accepted it is very uncommon for eclampsia to recur. It is especially rare when it was the first pregnancy that was thus complicated, and when there is no evidence of residual hypertension or albuminuria. Nevertheless special precautions are indicated. First, the patient should be put on a diet (e.g., high protein, low carbohydrate) to restrict gain in weight. Secondly, she must be examined weekly from the 28th week, and admitted to hospital if any signs of toxæmia develop. Thirdly, she should be booked for delivery in hospital, where a close watch must be kept on her labour from its earliest stage and prompt steps taken to counter any undue rise in blood-pressure during labour and the first 24 hours after delivery.

NOTES AND COMMENTS

Drugs for Cerebral Arteriosclerotic Symptoms.—Dr. B. BROOM (London W.1) writes: I would suggest that the inquirer ("Any Questions?" June 23, p. 1777) who asked about drug treatment for an elderly patient with cerebral arteriosclerosis and spastic lower limbs would be wise to exclude the presence of a parasagittal meningioma.

Dr. H. C. J. BALL (Southampton) writes: Your expert in his answer to the problem of drugs for cerebral arteriosclerotic symptoms stated that drugs are likely to be of only limited value. Could it be that the irritability and depression mentioned in this patient's case are aggravated by his lower-limb spasticity? The question did not give any indication of its severity. May I suggest that a truly helpful treatment is by blocking the anterior motor root nerves responsible—intrathecal—with a long-acting sclerosing agent such as phenol 7% in myodil, or alcohol 90%? This is a treatment only to be undertaken by those experienced in its problems, but is dramatic in relief of spasticity and of pain.

OUR EXPERT replies: I agree with Dr. Broom that it is important to establish the diagnosis and in particular to exclude the presence of a parasagittal meningioma, which may well be amenable to surgical treatment. The question makes no mention of pain in the lower limbs, and the technique suggested by Dr. Ball, although of great value in relieving the painful flexor spasms of patients with paraplegia in flexion, is unlikely to be helpful for the spasticity due to cerebral arteriosclerotic brain damage.

Correction.—We regret that the descriptions of the authors of the paper on "ABO Blood Groups and Acute Respiratory Virus Disease" (July 14, p. 89) were transposed. Dr. J. C. McDonald should have been described as of the Epidemiological Research Laboratory, Colindale, and Flight-Lieutenant A. J. Zuckerman as of the Royal Air Force.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON W.C.1. TELEPHONE: EUSTON 4499. TELEGRAMS: *Aitology, Westcent, London*. ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated.

Authors desiring REPRINTS should communicate with the Publishing Manager, B.M.A. HOUSE, Tavistock Square, W.C.1, on receipt of proofs. Authors overseas should indicate on MSS. if reprints are required, as proofs are not sent abroad.

ADVERTISEMENTS should be addressed to the Advertisement Manager, B.M.A. House, Tavistock Square, London W.C.1 (hours 9 a.m. to 5 p.m.). TELEPHONE: EUSTON 4499. TELEGRAMS: *Britmedads, Westcent, London*.

MEMBERS' SUBSCRIPTIONS should be sent to the SECRETARY of the Association, TELEPHONE: EUSTON 4499. TELEGRAMS: *Medisecra, Westcent, London*.

B.M.A. SCOTTISH OFFICE: 7 Drumsheugh Gardens, Edinburgh.