Lubricant Unnecessary for Syringes

SIR,—The observation of Darling and Spencer (February 10, p. 300) that a silicone may be used in place of liquid paraffin as a lubricant for syringes which are to be sterilized by hot-air at 160° C. is useful to those concerned with the running of syringe services. We also, in this laboratory, became very dissatisfied with the disagreeable mess produced by liquid paraffin and wondered whether it was really necessary to use a lubricant at all. We were rather surprised to find that lubricants are indeed unnecessary in syringes, and for two years now we have prepared without lubricants all syringes used for intravenous work and the results have been entirely satisfactory, there having been only one complaint of a syringe with a plunger stuck in its barrel.

The syringes, which are all glass, are well washed in cold water in the ward or clinic immediately after use, and later, in the laboratory, they are washed again under the cold water tap. They are then rinsed first in distilled water, then in methylated spirit, and finally in ether. The last three cleansing fluids are placed in small beakers from which they are sucked up into the syringe and squirted back again, the process being repeated two or three times in each case.

It should be noted that neither soap nor hot water is used, and these appear to be unnecessary provided the syringes are well rinsed immediately after use.—I am, etc.,

Dartford, Kent. MALCOLM PEARSON.

Side-effects of Antibiotics

SIR,—I agree with Dr. W. Tomaszewski (February 24, p. 388) that, with the increasing use of chloramphenicol and "aureomycin," attention is focused more and more on the side-effects of these newer antibiotics. Since my report dealing with serious untoward effects of aureomycin was the first to appear (*British Medical Journal*, 1950, **1**, 491). and was subsequently followed by an annotation (ibid., 1950, **1**, 1184), I may perhaps be allowed to make some comments on this question.

The most dramatic manifestations besides diarrhoea, depression, and drowsiness are undoubtedly the changes of the mucous membranes. My colleague, who was the unfortunate subject of my original letter, will certainly agree with Dr. Tomaszewski that the side-effects may make the use of these antibiotics "somewhat difficult and unpleasant." As those patients entitled to obtain aureomycin in this country at present are usually seriously ill, it appears to be of considerable importance to spare them troublesome after-effects. Since my communication it appears to be agreed that the administration of vitamin-B complex is most efficacious both in prevention and for the treatment of these symptoms. It has been my practice during the last 13 months to give three tablets three times daily. starting simultaneously with the first dose of aureomycin, of a preparation containing 5 mg. thiamine, 2 mg. riboflavin, 20 mg. nicotinamide, 2 mg. pyridoxine, and 3 mg. calcium pantothenate. Untoward after-effects were not observed if B-complex was continuously given for at least one week after cessation of the aureomycin administration. Recently, however, in the case of a young house-surgeon who contracted a penicillin-resistant intranasal boil with facial cellulitis, administration of nine of the tablets daily did not prevent a moderate glossitis and stomatitis with very troublesome anal and perineal pruritus (total dose 5 g. aureomycin).

The explanation of the mechanism of these mucous membrane changes has not advanced substantially since my original report, but some additional partly controversial findings concerning aureomycin and vitamin B_{12} have just been discussed in the *Journal* (February 24, p. 404). It is also puzzling that 10–20 times the daily requirement of the B-complex vitamins should be necessary for the prevention, or alleviation, of untoward side-effects after only a short course of aureomycin treatment in otherwise well-nourished patients. Still, until more knowledge has been accumulated, it would save much additional suffering if patients having aureomycin and chloramphenicol treatment were routinely given large doses of vitamin-B complex.—I am, etc.,

London, W.1. Z. A. LEITNER.

Pethidine Sensitivity

SIR,—Dr. R. I. Bodman (February 17, p. 354) in his criticism of my case report (January 20, p. 125) elaborates the points raised by Dr. Harry F. Griffiths (February 3, p. 250), and I feel that some reply is necessary in order to put things in their proper perspective.

Considered stage by stage, the case takes on a different aspect from that represented by Dr. Bodman's telescoping of events. Some seven or eight minutes elapsed between the initial administration of thiopentone and the injection of pethidine; this time was taken up with intubation and the arrangement of the patient on the table. After intubation the patient began to breathe in a matter of seconds, and regular respiration was established within a minute or so. This was particularly remarked, as the case was being demonstrated to postgraduate students.

Dr. Bodman seems to suggest that, after the usual effects of thiopentone had been established for some minutes, it so happened that almost immediately after an injection of pethidine the thiopentone suddenly produced, as an afterthought so to speak, or perhaps because of some kink in the space-time continuum, profound hypotension. While not disputing that thiopentone can produce severe hypotension where cardiac disease exists, or when given in excessively large doses, I cannot accept that either of these conditions was present in the case under discussion. Indeed, Griffiths and Gillies (*Anaesthesia*, 1948, **3**, 134), describing their technique for total spinal block, state that the usual induction dose of thiopentone is 1 g., yet it has never been suggested that the hypotension produced in their cases was due to this drug and not to the spinal block.

Of the other phenomena under discussion, the tachycardia may have been caused by "flaxedil," but was more probably the normal physiological response to hypotension in accordance with Marey's law. Dr. Bodman agrees that the apnoea was certainly produced by pethidine, but I cannot accept his view that the reaction observed was within the normal limits for that dose in that patient.

The fundamental principle in anaesthesia, and especially in closed-circuit anaesthesia, is equilibrium. Because of friction the perfect mechanical system capable of perpetual motion does not exist. In anaesthesia the equivalent of friction is, broadly speaking, catabolism, first of the anaesthetic agent and secondly of the body's resources. These changes being fairly gradual, the system may be considered in equilibrium over a short period of time, and analogy with Newton's first law of dynamics leads us to look for a sudden cause for any sudden change. I maintain that the intravenous injection of pethidine was the cause of the sudden hypotension and apnoea in this case.

In the words of William of Occam, "It is vain to do with more what can be done with fewer," and I suggest that the three phenomena observed can be attributed to the pethidine alone and do not need three different causes to be ascribed to them.—I am, etc.,

London, N.W.11. D. ZUCK.

Acute Tonsillitis

SIR,—General practitioners learn with surprise if not with vexation that sulphonamides are valueless in acute tonsillar infections (February 17, pp. 323, 326; March 3, p. 474). Before the sulphonamide era acute tonsillitis was a severe illness accompanied by fever (even rigors), profound toxaemia, rapid pulse, fall of blood pressure, general signs of relative peripheral failure (giving a clinical picture often indistinguishable from acute diphtheria), in addition to the usual local throat signs with which all doctors are familiar. The acute phase continued for about a week, after which resolution took place or peritonsillar abscess followed.