gases, lactate metabolism, and acid-base balance during and after exercise, and some of the results are to be published shortly. Basically we found that none of these factors could explain the origin of exercise-induced asthma or the difference with different forms of exercise. Likewise, we have studied lung volumes and mechanical properties and found that they reflect rather than cause the asthma.

Finally, we would like to repeat our earlier suggestion that the mechanism of exercise-induced asthma and the difference between the severe constriction due to running compared with the virtual absence during swimming may reflect neuromuscular differences in the types of exercise. For this reason, we are now proposing to study the effect of whole body vibration at a level similar to that which occurs during running in patients with asthma.—We are, etc.,

SANDRA D. ANDERSON
M. SILVERMAN
E. TAI
S. GODFREY

Department of Paediatrics,
Institute of Diseases of the Chest,
London S.W.3

¹ Anderson, S. D., Connolly, N. M., and Godfrey, S., *Thorax*, 1971, **26**, 396.

² Connolly, N. M., and Godfrey, S., *Journal of Asthma Research*, 1970, **8**, 31.

Prepubertal Vaginal Examination

SIR,—It is occasionally necessary to perform a pelvic examination on a prepubertal girl. The usual indication for this is when it is suspected that a nonopaque foreign body has been inserted into the vagina. Pelvic examination is usually performed with an auroscope or a nasal speculum. Both these methods do not always give an adequate view of the whole vagina and may tear the hymen.

Recently I have visualized the vagina using a laparoscope with a fibre optic light source. This can be inserted through the intact hymen without trauma. The whole of the vagina and cervix may be examined in detail. If the hymeneal orifice is small the Stortz instrument is more valuable than the Wolf laparoscope because of its narrower bore. Either the 180° lens or the 130° lens can be used, but the 180° lens is probably best to exclude the presence of a foreign body.—I am, etc.,

B. VICTOR LEWIS

Maternity Unit,
Watford General Hospital,
Watford, Herts

Intravenous Glucagon

SIR,—Glucagon is a biological product which for many years has been given by parenteral injection in the management of severe hypoglycaemia occurring in patients with diabetes mellitus. In this context glucagon is safe and effective. More recently, in certain experimental studies, investigators have been administering glucagon by intravenous infusion or repeated bolus injections in the management of certain cardiovascular conditions (28 August, p. 524) and in the treatment of acute pancreatitis (22 May, p. 440). Recent animal studies in the Lilly laboratories have revealed findings that may be of concern regarding continuous infusion of high concentrations of glucagon.

Dogs were infused intravenously with

glucagon dissolved in 5% (w/v) dextrose solution continuously for periods of five days to four weeks. The amounts given were four to ten times the human dose for cardiac indications. (This we have taken as 4 mg/hr in a 70 kg man.) At the completion of the studies all tissues were found to be normal except the lungs. Several small pulmonary arteries contained small emboli (100-400 microns in diameter) of hyaline material. Material was birefringent when examined under polarized light, as are gels in vitro when glucagon solutions are subjected to optimal conditions for gel formation. The emboli had no clinically evident adverse effect on pulmonary function.

On the basis of these studies we feel that the investigational use of glucagon by intravenous infusion or by repeated intravenous injection should be curtailed until further studies elucidate this problem.—I am, etc.,

W. I. H. SHEDDEN

Director of Clinical Research,
Lilly Industries Ltd.

Basingstoke, Hants

European Pharmacopoeia

SIR,—Your note about the *European Pharmacopoeia* (Supplement, 11 December, p. 69) says that orders should be sent to the French publishers. In fact the distribution rights of the *European Pharmacopoeia* for most of the world outside continental Europe are held by The Pharmaceutical Press, 17 Bloomsbury Square, London WC1A 2NN. Copies can be ordered either direct from The Pharmaceutical Press or through any medical bookseller. The price of each of the two volumes so far published is £10 post free.—I am, etc.,

BRIAN O'MALLEY

The Pharmaceutical Press,
London W.C.1

Points from Letters

Acknowledgement for Help

DR. M. H. HUGHES (Public Health Laboratory, Royal Hampshire County Council, Winchester) writes: Dr. M. D. Hellier and others (13 November, p. 404) have reported an unusual and interesting case. Their report was based almost entirely on laboratory work. The colleagues who provided the reports on light and electronmicroscopical studies which form the second half of the paper are thanked. The colleagues, if any, who provided the serological reports on which the whole paper rested were not mentioned, nor was the source of the biochemical and haematological information revealed. . . .

** We showed Dr. Hughes's comment to Dr. Hellier who replies as follows: "Dr. Hughes correctly points out our failure to acknowledge some of the help we obviously received in preparing our report, with particular reference to the serological results. These results were certainly important in confirming the clinical diagnosis of syphilis and we accept this point. We were most grateful to the Southampton Laboratory and the Venereal Disease Reference Laboratory for their results. However, in a brief, single case report a limit has to be made to the number and length of the acknowledgements. It is somewhat arbitrary and therefore difficult to know just where to draw this line. In any clinical case many individuals and departments are inevitably involved. . . ."

Bring Out Your Dead!

SIR,—As a district medical officer of health I have accepted an increasing isolation from the health services as a part of a gradual process leading up to our forthcoming demise. It no longer comes as a surprise to find that the district medical officer of health is often one of the last persons to hear of developments in the health services in his area. Nevertheless it came as a very profound shock indeed to read in the Registrar General's *Quarterly Return* (quarter ended 30 June, 1971)¹ that during 1970 there had been 209 deaths from plague in England and Wales.—I am, etc.,

JOHN L. COTTON

East Sussex United Districts,
Lewes, Sussex

¹ Registrar General's *Quarterly Return for England and Wales*. London, H.M.S.O., 1971.

Review Body Report

SIR,—The pool by any other name stinks just as bad to me. I have suspected for some time that the deliberations of the Review Body were really based on a pool conception but this Review Body has come out quite honestly about it. They talk, of course, about the "average income of the general practitioner," but this multiplied by the number of practitioners brings you back to the pool. If more work is done and it is found that the average income is thereby more than it was estimated to be, this fact will be taken into account at the next review and the rate of remuneration cut.

Similarly it is now quite obvious that what was supposed to be extra money for incentives to go into group practice centres is in fact simply redistribution money.—I am, etc.,

MICHAEL WADE

Risca, Mon

We would like to have been able to acknowledge all. For reasons that must surely be apparent this was not possible.—ED., *B.M.J.*

Breast-milk Jaundice and Oral Contraceptives

DRS. B. S. B. WOOD and Y. K. WONG (The Children's Hospital, Ladywood, Birmingham) write: We agree with Professor G. H. Lathe (4 December, p. 626) that we perhaps should have used the term "idiopathic jaundice" rather than "breast-milk jaundice" in our title. We have investigated the incidence of jaundice in bottle-fed infants and found it over all to be much lower than in the breast-fed—that is, around 15%—and also that this incidence is the same whether the mothers had oral contraceptives or not.

Pensions and the Abatement Rule

DR. A. S. PEARSON (Sutton Coldfield, Warwicks) writes: I agree with Dr. E. M. Sandford (4 December, p. 627) . . . I am not allowed to earn more than I did in 1963. If I do the extra money that I receive from the N.H.S. is deducted from my pension. The most that I can earn is £602 per quarter, and when one considers the increased remuneration that general practitioners now get as compared with my salary in 1963, it is ludicrous. There is no provision made for increased cost of living, which since 1963 must be considerable. . . .