

### Period of Gestation

SIR,—Most valuable and accurate information could be given on this subject by married couples where both husband and wife are doctors. We are such a couple, and over the first seventeen years of our married life three births occurred. The first pregnancy was associated with 255 days of amenorrhoea; the second lasted 257 days from the actual day of fertilization, as did the third. At the birth of the first child, we assumed that he was premature in spite of his normal size and normal length of finger-nails. When the second child appeared after 257 days we rejected the idea of prematurity, especially as this child weighed 11 lb. (4.95 kg.).

The maternal menstrual cycle recurs every 24 days with remarkable regularity, and we thought that this shortened intermenstrual time might influence the gestation time to be shorter. On this basis we confidently and correctly predicted the approximate birthday of our third child.

Dr. S. H. Waddy, in his interesting letter (May 24, p. 1132) is thinking along similar lines, and he suggests that a pregnancy lasts ten times the mother's intermenstrual period. In our case, although there is such a tendency, the total gestation time from actual date of conception is more than  $10 \times 24 = 240$  days; it is 257 days.

Possibly it is not only maternal factors that influence gestation time; the foetus is born when it is mature, and its rate of attainment of maturity may be inherited from both parents and be a compromise between the two. For example, every poultry farmer who crosses a female Aylesbury duck with a Muscovy drake knows that the resulting egg looks exactly like an Aylesbury egg, but the hybrid emerges at 31 days—a compromise between the respective periods of incubation of 28 days in the case of the Aylesbury duck and 35 days in the case of the Muscovy.

On the basis of our limited observation it would be foolish to dogmatize. We suggest, however, that some future investigation such as the Birmingham series should be analysed along lines to discover whether the gestation time is  $10 \times k$ , where  $k$  is a compromise between the intermenstrual time of the mother and the intermenstrual time of the females on the paternal side.—We are, etc.,

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### Perforation of Small Intestine

SIR,—Reading Mr. Hilary Wade's article (October 25, p. 922) on perforation of the small intestine reminded me of a similar case treated here last year.

A married girl of 26 was admitted with a 24-hour history of abdominal pain, which had moved from epigastrium to right iliac fossa. She complained of nausea but no vomiting. She was also suffering from thyrotoxicosis. A diagnosis of acute appendicitis was made. At operation a Meckel's diverticulum was found to be present, the apex of which had been perforated by a bristle lying partly in the diverticulum and partly in the peritoneal cavity, with an area of surrounding inflammation. The diverticulum was removed. The bristle was the size and shape of those used in the manufacture of tooth brushes.—I am, etc.,

Great Yarmouth.

J. B. BINKS.

### An Obstetric Thimble

SIR,—In 1934 I published a very brief article, "A Simple Device for Rupturing Membranes" (*Amer. J. Obstet. Gynec.*, 1934, 27, 273), in which I suggested a spiked thimble for rupturing the foetal membranes. The thimble idea occurred to me while reading, in one of my grandfather's medical books, of the custom of the early accoucheurs to employ a sharpened finger-nail to rupture the membranes. Modern rubber gloves prevent the use of the finger-nail, but it occurred to me that a thimble with a raised pointed sector could be substituted.

This second report is to describe more fully my conception of an obstetric thimble and also to give a technique for using it. Any handyman can, with a jeweller's saw and file, make the device. Two cuts are made in the end of a silver thimble, these intersecting in or near the centre and at slightly more than a right angle. The sector so delineated is then slightly raised and the rough edges are polished off, preserving the point. A small hole is drilled in the base to which a stout nylon cord can be attached for retrieving the instrument in case it should slip off—an accident which rarely happens. Obviously, the foregoing method is by no means the only one of making a point or spike on the end of a thimble. Instrument-makers may suggest improvements which might simplify manufacture. The method I have suggested, however, seems safe and effective.

While some doctors have employed the obstetric thimble for initiating labour, I personally do not now recommend it for this purpose. I advise that the thimble be used only during the second stage of labour, when the cervix is fully dilated and tough membranes seem to be delaying the further progress.

The technique recommended is as follows: The sterilized thimble with cord attached is placed firmly over the tip of the first finger of the examining hand. The point of the thimble is towards the palm. The middle finger of the same hand is placed behind the first finger to protect the point from doing any injury to the soft parts. Previous examination having shown the cervix to be fully dilated, the head rotated and flexed, and no reason for a delay in labour, except tough membranes, the fingers are inserted in the vagina as for examination.

The middle finger being used for palpation, it is slightly flexed on encountering the membranes and a scratching movement is made with the first finger while the thimble is in contact with the membranes (between pains). The membranes are easily ruptured, allowing the escape of amniotic fluid. The technique is very easy and the danger to mother and child minimal. Of course, one should not mistake the buttocks, scalp, or face for unruptured membranes.

A great deal of obstetrics is still, of necessity, done in the home. Therefore an instrument which can be used by touch while the patient is in her bed has advantages. The obstetric thimble can be characterized as one of the less obdurate of obstetrical instruments. Ease of technique should, however, not lead to unnecessary tinkering with the normal process of labour.—I am, etc.,

Quebec.

ROBERT P. LITTLE.

### A Syringe Label

SIR,—Modern anaesthesia is typified by the multiplicity of drugs used. The large number of syringes which litter the anaesthetic trolley is mute evidence of this. The harassed anaesthetist is faced with watching the colour of the patient, his pulse and respiratory rates, blood pressure, general condition, and also four flowmeters, a rebreathing bag, and the contents of two or three syringes. The result of some confusion with the latter difficulty was that a search was made for a simple method of labelling the contents of a syringe.

The illustrated syringe-label clip was designed and made by the Senior Anaesthetic Technician of the Queen Victoria Hospital, East Grinstead, Mr. Cyril Jones. It is simple, cheap, and effective, and takes very little time to make.

The material is "perspex," and strips  $\frac{1}{4}$  in. (6 mm.) wide are sawn off a sheet  $\frac{1}{4}$  in. thick. These strips are then cut up into varying lengths, the length depending upon the size of syringe it is intended to label. The clip encircles about three-quarters of the circumference of the syringe, and some approximate lengths are 20 ml. syringe,  $2\frac{1}{4}$  in. (6.5 cm.); 10 ml. syringe,  $1\frac{1}{4}$  in. (4.5 cm.); 5 ml. syringe,  $1\frac{1}{4}$  in. (4 cm.); 2 ml. syringe,  $1\frac{1}{4}$  in. (3 cm.).

After strips of the appropriate size are cut they are labelled. The label can be typed, but better than this are the printed headings found in the literature sent out by the drug houses.

The back of the perspex strip is moistened with a drop of chloroform, which is a solvent for perspex, and the label, which has previously been cut to size, is pressed into the softened perspex and left to dry. The back of the label is then coated with a varnish to render it waterproof. Mr. Jones uses a varnish