

menstruation signifies the end of the episode. Otherwise the uterus will eventually give up its dead, and the process of expulsion of a missed abortion is often rapid and complete; but if it is not, then ergometrine 0.5 mg. is injected and the patient is transferred to hospital. If in the first three or four months the products are expelled in one piece, it is common to find the amniotic sac intact but on opening it no embryo is seen—it has died and been absorbed.

### Aftercare

Any woman who has had haemorrhage in pregnancy before the 28th week should be followed up carefully by her doctor, whether or not the pregnancy continues.

If she aborts, the doctor should see that she does not return to full household or other duties too soon, and the aid of the social services should be sought if necessary. The haemoglobin level should be estimated, and there is everything to be said for a routine cervical smear being taken after an abortion in the same way as post-natally. Certainly any cervical lesion discovered during or after the pregnancy must be treated.

Advice regarding future pregnancies or contraception may be sought or indicated. The woman who inquires how soon after an unsuccessful pregnancy she can try again is often

advised to wait six months or more. But if there is no general condition or local lesion requiring treatment or contraindicating another pregnancy, three months is enough. The exception is the habitual aborter who should be referred for specialist investigation before embarking on another pregnancy.

The woman who has had a hydatidiform mole is usually followed up by the hospital unit for two years in order to exclude malignancy. After a tubal gestation the chances of a further conception are in general only about 35%, but investigation (for example, salpingography) may show that the outlook in an individual woman is better or worse than average.

If the pregnancy continues, the patient deserves close attention. That bleeding before the 28th week was probably due to low implantation of the placenta may be proved later when in the last trimester placenta praevia is diagnosed. Because of this and because, as mentioned above, the perinatal mortality in pregnancies marked by bleeding in the first six months is above average, these patients are better booked for delivery in hospital.

**Correction.**—In the article by Mr. D. B. Brown entitled "Education of the Pregnant Woman" (28 March, p. 823) it was said that psychoprophylaxis was being taught to interested practitioners under the auspices of the National Birthday Trust. We regret that this statement was incorrect. The National Birthday Trust have notified us that in fact they have not supported this work and do not arrange classes or provide information about centres.

## TO-DAY'S DRUGS

### Laxatives and Purgatives

The terms purgative, cathartic, evacuant, laxative, and aperient are often used synonymously, but on semantic grounds one would expect the first three types of drug to promise greater therapeutic efficiency than the other two. Many American writers, e.g., Goodman and Gilman,<sup>1</sup> employ the word cathartic to cover all types of drug that promote emptying of the bowel. The terms laxative, purgative, and "drastic" can then be used to imply increasing potency. However, the *British National Formulary 1963* recognizes only laxatives and purgatives.

The main applications of these drugs in therapeutics are: (1) in the treatment of functional constipation and: (2) for clearing out the bowel after ingestion of poisons or before certain radiological investigations and operative procedures. One would imagine the milder laxatives to be indicated more for the first situation, and the more potent purgatives for the second, although there is an increasing tendency to employ the milder drugs for both purposes. The more powerful kind of drug is still used (especially by the lay public) for the treatment of temporary or chronic constipation, and this can lead to undesirable side-effects which will be mentioned later.

The abuse of purgatives and laxatives by the layman has been much written about, and has been attributed quite reasonably to the psychological associations inculcated in so many people's minds as a result of over-conscientious toilet-training in infancy. These associations are reinforced and exploited in later life by drug advertisements in the popular press. It is perhaps now becoming more generally accepted by the public that there is considerable normal variation between individuals in the frequency with which they need to empty their bowels, and that daily evacuation is not a *sine qua non* for healthful vigour and youthful *joie de vivre*. Faulty diets, lacking the bulk provided by plenty of vegetables, cereals, and fruit, are again somewhat less common than they used to be. However, before the practitioner prescribes drugs or encourages their use, he would still be well advised

to make sure that a simple explanation of the physiology of defaecation, or a judicious change of dietary habits and increased physical exercise, would not be sufficient treatment for his patient's lower intestinal preoccupations.

As for the drugs themselves, most of those still prescribed to-day have been in use for many decades, if not centuries. Because of their undoubted efficacy, research on newer drugs of this kind by the pharmaceutical firms is minimal, though of course innovations in the blending, preparation, and packaging of those well-tried compounds appear with regularity. Only one fundamentally new type of purgative, "beogex," has been launched since an article on "Purgatives and Laxatives" appeared three years ago in this journal.<sup>2</sup> This preparation, with its novel mode of action, is yet to be fully evaluated.

### Pharmacology

Laxatives and purgatives are traditionally classified according to their mode of action:

1. Bulk.
2. Lubricant.
3. Irritant.

The relatively new drug bisacodyl ("dulcolax") has a mode of action that does not quite fit into the classical irritant category; and beogex is described by the makers as an "effervescent suppository."

### Bulk purgatives

These increase the volume of the intestinal contents, and so stimulate intestinal peristalsis. They may be solid or liquid (saline purges). The solid ones span a range from what are virtually foodstuffs (bran; extracts of prune or fig), through substances of plant or algal origin (agar; psyllium seeds; sterculia), to synthetic chemicals (methyl cellulose; sodium carboxymethylcellulose). The saline purgatives are salt solutions containing non-absorbable or poorly absorbable ions