a few occasions we used solutions containing several thousand units of penicillin per ml., but these sometimes caused excessive mucoid nasal discharge. A. W. Proetz (*Ann. Oto-laryng.*, 1945, **54**, 94) has shown that concentrations of more than a few hundred units of penicillin per ml. interfere with ciliary action. The extranasal end of the catheter may be treated with a disinfectant before performing the washout. The amount of solution employed for each washout has varied from 7 to several hundred ml.

The lavages have been discontinued after there has been a return free from pus several times, or after a maximum period of three weeks, the catheter then being removed. A number of cases still having pus in the antra after such treatment for three weeks have been found to be free from sinusitis after a further month or two without treatment. Some others have been cured by staying in a convalescent home at the seaside. Vitamins in adequate amounts have also been administered to all these patients.

Cases not cured by such treatment have also not been cured by intranasal antrostomy, which we have found therapeutically inferior to it; also, children prefer antral lavages through a catheter as described to washouts through an antrostomy by the usual methods. These uncured cases, when the symptoms caused by the sinusitis have been sufficiently severe, have been treated by Caldwell-Luc operations, the diseased antral lining being removed. The youngest patient so treated was four years old, but in some older children also the antral cavity may be so small as to make the operation not feasible without damaging unerupted teeth. The results of this operation in children in general have been found satisfactory; no harm has resulted in any case; continuation of symptoms and signs of sinusitis is usually due to disease of other nasal sinuses, and in a few severe cases we have been able to relieve or cure them by intranasal, transantral, or external surgery to the ethmoid, sphenoid, or frontal sinuses.

In some unruly or small children who persist in pulling out the catheter we have followed the lead of G. H. Bateman (*J. Laryng.*, 1945, **60**, 110), filling the antra once or twice with a paste containing penicillin, sulphathiazole, flavazole, soluthiazole, or several of these in lanette wax or plasma solution concentrated to the consistency of honey. A few cases have been cured, and some more temporarily relieved, by this method.

In our experience systemic penicillin or sulphonamide therapy for chronic nasal sinusitis, while temporarily relieving some cases, has nearly always failed to cure them. Proetz suction-displacement treatment we have also found disappointing. It has been our experience that the removal of tonsils and adenoids in cases of chronic sinusitis does not lead to its cure, that it is often more important to treat it than to remove the tonsils and adenoids, and that at any rate in very purulent cases it is best treated before this operation is done. Incidentally, bronchiectasis and chronic nasal sinusitis co-exist fairly frequently.—I am, etc.,

Warwick,

J. A. HARPMAN.

Relief from Pain in Obstetrics

SIR,—It would be a fitting centenary tribute to Simpson if we could create and build up an adequate national organization for giving relief from pain in obstetrics. One hundred years ago James Young Simpson showed that the suffering endured by our young mothers could be reduced to a minimum, but his teaching was not understood. In 1933 R. J. Minnitt produced an automatic apparatus for the administration of gas-air analgesia; his teaching has been wilfully neglected. Can we never abolish the scandal of the "woman in pain"?

I have closely watched the results of gas-air analgesia when properly administered since November, 1933, and I have in my possession many hundreds of record papers signed by mothers stating that the vast majority of them were given adequate relief from pain. I am sorry to say that I have also received many letters from patients from all parts of England telling me of experience of indifferent analgesia. One writes: "One nurse in charge of a ward has told me that she always gives mothers the machine to use, but never turned it on." Another: "The birth of my own baby was a nightmare I shall never forget, and the gas-and-air machine provided in the County Council hospital . . . had no effect whatever." And this sad story is repeated over and over again. I know that these letters are true. I have many times visited hospitals and seen gas-air machines in such a condition that no help could be expected from their use. I have seen the gas and air administered in so careless a manner that one was left with the unhappy impression that those in charge of the administration did not care whether the patient was helped or not. Yet from the use of the latest models of gas-air machines it is possible to obtain complete

relief from pain in 95% of cases, and we have in addition the opportunity to use trileine and air, a promising newcomer.

There are two main causes for failure to give adequate analgesia: (a) lack of medical interest; (b) shortage of staff. (a) While the midwife is perfectly capable of taking charge of the administration of analgesia, yet she must have "medical interest" in her work. Machines and equipment need frequent examination by medical practitioners, as they sometimes need adjustment, and experienced practitioners should visit the labour ward to see that there is no error in the technique of administration. In all hospitals and in all districts there is need for the appointment of medical analgesists to help the midwives. The periodical visit from the manufacturer's agent is not enough. (b) There is an acute shortage of midwives, so that those in practice have too much to do. The demand for the provision of analgesia by the midwife may well be the last straw which is breaking the back of a very willing camel. If this is so, provision must be made for the creation of a body of nurse-technicians who must be trained to become "analgesists."

I criticize and condemn not the midwife nor the medical practitioner but the whole body of our countrymen and countrywomen, who callously allow hundreds of thousands of women to suffer the extremity of pain for the maximum of time when most efficient and adequate means of relief are available for the use of an organized analgesia service. Yet fourteen years after the introduction of the use of nitrous-oxide-and-air analgesia no such organization has been provided.

What a tale to tell of England one hundred years after Simpson's discovery! We have the knowledge of how to relieve pain, we have excellent machines designed for this purpose, we lack only a genuine national desire to help and an efficient national organization.—I am, etc.,

New Barnet, Herts.

JOHN ELAM.

Obstetric Flying Squads

SIR,—The detailed account by Mr. Frank Stabler of the Newcastle-upon-Tyne Obstetric Emergency Service (Nov. 29, p. 878) must have been of great interest to many readers, especially in view of the way the development of the service has been dictated by local conditions. However, there is a danger that some may be misled into believing that the routine described is applicable to most obstetric emergencies, despite the author's remarks that "this centre is probably unique," and forgetting too the tremendous advances that have recently been made in resuscitation and transfusion, developed largely by the Army Transfusion Service.

The author's statement, "There is no doubt that the pregnant woman who has lost blood must be saved an ambulance journey," might lead one to suppose that cases of antepartum haemorrhage are best treated in the home. In most districts the opposite is true, and the emphasis should be placed upon non-interference, a strict ban on vaginal examination, adequate morphine, and admission to hospital as soon as the stage of primary shock is passed. The role of the flying squad should be that of a resuscitation unit for the continuous transfusion of the most severe cases during transit to hospital.

With reference to intra-partum emergencies, the statement, "The *bad old system* [my italics] of transporting these gravely ill and shocked women to hospital lessened their chances of subsequent recovery," is again open to criticism. In addition to blood transfusion and expert obstetrical handling these bad-risk cases require highly skilled anaesthesia, hospital nursing, and frequently the presence of assistants, if the occasional fatality is to be avoided. It would be interesting to know what part the anaesthetic played in the four recorded fatal cases of obstructed labour, while the obstetrician must indeed be a bold man who would set out to control a diabetic coma or tackle a ruptured uterus in the patient's home.

It is certainly among the immediate post-partum emergencies that the service finds its chief field of use, and the description of manual removal of the placenta as a life-saving operation is amply justified. Its hazards and drama may largely be removed by vigorous and enthusiastic blood transfusion pre-operatively. In those cases of retained unseparated placenta in which shock predominates over blood loss the use of "methedrine" will raise the blood pressure enough to ensure safety of operating; while thiopentone injected in small dosage into the transfusion tubing makes an admirable anaesthetic that may be administered by the relatively unskilled assistant.

In conclusion it is emphasized that in most districts the domiciliary treatment of ante-partum and intra-partum

emergencies is seldom in the patient's best interest, and an obstetric emergency service should consist primarily of an ambulance equipped as an efficient resuscitation unit with unlimited blood at its disposal. The obstetrician can thus ensure that he is not forced by circumstances to perform operations at home that would have a wider margin of safety in hospital.—I am, etc.,

Birmingham.

W. G. MILLS.

Child-bearing and Tuberculosis

SIR,—Child-bearing and tuberculosis is still a subject which arouses strong feelings. We are grateful to your correspondents for their interest in our work and for some very appreciative remarks. We have endeavoured to make an objective judgment on this difficult subject, but we hope our figures are a sufficient basis for an opinion. It cannot be denied that the tuberculous disease in some patients becomes worse in association with pregnancy. This is a habit of tuberculous disease in non-pregnant women too, and in our experience equally common in both groups.

We too wish to emphasize the importance of the environment of the tuberculous woman who has borne a child. Efficient treatment of the disease and the best possible after-care with adequate home help are especially necessary for these patients. Whether therapeutic termination of pregnancy is advisable because the child will be born into an unsuitable environment is a moot point, but such a view would cause the termination of many more pregnancies than those of tuberculous women. Because tuberculosis carries a definite risk of relapse, we think that the patient should avoid pregnancy for at least two years after quiescence of the disease has been achieved. Yet only 22 (10%) of the patients in our series were diagnosed as tuberculous *after* becoming pregnant. We are surprised how often effective (or indeed any) advice concerning birth control is lacking. Of these 22, 11 were over fourteen weeks pregnant; few would advise termination at such a stage. We therefore consider that good treatment and care in adjusting the environment, including the effective prevention of pregnancy where advisable, are more important than undue optimism about the value of therapeutic abortion.—We are, etc.,

CHARLES J. STEWART.
F. A. H. SIMMONDS.

South Mimms, Barnet, Herts.

"True" Hermaphroditism?

SIR,—Without splitting too many semantic hairs, is there any such thing as "true" hermaphroditism? Whatever gross abnormalities may subsequently be induced by hormone imbalance, what one might term the *fundamental sex* of the individual is determined once and for all at the moment of conception by a particular combination of chromosomes that apparently persists for life. Current theory does not allow for both *xx* and *xy* combinations to co-exist in one body, though in biology even the fantastic cannot be excluded. Have the chromosomes of frank hermaphrodites ever been seriously studied? The forensic implications are enormous.—I am, etc.,

Hooton, Cheshire.

J. R. EDISBURY.

Routine Serological Tests for Syphilis

SIR,—The letter of Dr. K. G. Bergin (Dec. 6, p. 928) merits some comment. Routine serological tests are carried out in many antenatal clinics, etc., throughout the country, and with competent technique, as part of the established routine, attract no more comment from patients than the routine testing of the urine or taking of blood pressure. Where difficulties have arisen, these have in my experience most often resulted from the attitude of the medical officer or nurse, and have not been raised primarily by the patient. It is also instructive that patients accustomed to routine serological tests as part of routine antenatal surveillance comment adversely on this omission in other areas in which they may be temporarily resident.

In the City and County of Bristol approximately 75% (approximately 5,000 per annum) of pregnant women attend the health department clinics for antenatal care. Serological tests for the exclusion of syphilis have been carried out routinely since 1939; in not more than one or two cases per annum has the test been refused. Syphilis, previously undetected, has been found in less than 0.4% of patients. Facilities for the examina-

tion of serological tests would therefore be of little added advantage so far as the patients making use of the municipal services are concerned, and it is questionable whether this principle should be adopted until voluntary measures, supported by adequate health education, are shown to have failed.

With regard to marriage, surely a general medical overhaul to make certain of physical fitness is the ideal. The exclusion of tuberculosis is equally as important as negative syphilis serology, while Rh compatibility equally deserves consideration. In the past few years there has been an increasing number of patients, often of blameless antecedents—frequently engaged couples coming up together—desiring assurance of fitness for marriage, the main anxieties being venereal disease, tuberculosis, and fertility.—I am, etc.,

Bristol.

A. E. W. MCLACHLAN.

Belladonna Poisoning

SIR,—I am sure that your correspondent "R. L. G., R.A.F.V.R." (Nov. 29, p. 886) must be aware of the rules governing the storage and dispensing of the Schedule I group of poisons, which I believe includes belladonna preparations. I am therefore at a loss to understand why he had to discover "later" that it was contrary to Air Force regulations for a nursing orderly to dispense belladonna unsupervised. During my own Service career I have, through "supervising" the activities of orderlies in a station sick-quarters M.I. room, prevented disasters of like nature—e.g., concentrated phenol being used in mistake for glycerin-and-phenol ear drops; strong tincture of iodine in lieu of "argyrol" eye drops; and saturated sodium sulphate with acriflavine instead of sodium salicylate mixture.

It should always be remembered by those concerned that the so-called "nursing orderlies" in the present-day Royal Air Force may be (and too often are) unwilling conscripts, whose eyes are more accurately focused on the "demob. form" than on the labels of the dispensary bottles.—I am, etc.,

PER ARDUA AD ASYLUM.

Nicotinamide and Blood Sugar

SIR,—I was very much interested in the two cases of diabetes mellitus described by Dr. L. Gordon (Nov. 8, p. 748). The following is another unusual case of this disease which merits publication.

CASE REPORT

C. W., aged 54, was admitted to our hospital on Sept. 7, 1947, as he was anxious for an operation for a large irreducible umbilical hernia which was causing disfigurement. He complained of no other symptoms, and except for mild hypertension there were no abnormal signs. Height: 5 ft. 9 in. (1.75 m.); weight: 15 st. 5 lb. (95.2 kg.). Routine examination of urine showed specific gravity 1022, glycosuria, and ketonuria. Blood-sugar curve was typical of diabetes mellitus and gave the following figures:

Time of Day	Sugar in mg. per 100 ml.	Urinary Sugar
9 a.m.	210	++
9.30 "	280	++
10 "	340	++
10.30 "	300	++
11 "	265	++

He was stabilized on a 2,000-calorie diet with 20 units of soluble insulin and 30 units of protamine-zinc insulin every morning. Operation under local analgesia was performed by Mr. T. Eason on Oct. 8, 1947. Hernial sac containing adherent mass of omentum was excised and the wound was closed by through-and-through mattress sutures. Immediately following this operation he was free from glycosuria, needed no insulin, and two days later he was put on ordinary diet without any adverse effects. Blood-sugar curve was now of lag variety and gave the following figures:

Time of Day	Sugar in mg. per 100 ml.	Urinary Sugar
9 a.m.	110	Nil
9.30 "	175	
10 "	195	Trace
10.30 "	200	
11 "	172	Nil

Remissions in diabetes mellitus are well known, but the above case showed dramatic improvement after the operation, needing no insulin in spite of the subcutaneous tissue becoming