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

septic and the wound taking some time to heal. As the hernial sac contained a mass of omentum, is it possible that this immediate improvement is caused by improved pancreatic circulation? Vasodilatation follows the administration of nicotinamide, as shown by flushing of the face, etc., and it is suggested that apart from the role of nicotinic acid in carbohydrate metabolism the beneficial effects of this drug in diabetes mellitus may partially be due to improved pancreatic circulation, and that this effect will vary with the dosage.

The patient is now in good health and has lost 11 lb. (5 kg.) in weight. He was a heavy beer-drinker prior to his admission, but he now drinks only a pint a day, and this may be a contributory factor in maintaining the improvement. I would be glad to hear your readers' views on the above case.—I am, etc.,

London, S.E.18.

S. KARANI.

Leukanaemia and Myelosclerosis

SIR,—I wish to enter a plea for the retention of the term "leukanaemia" in regard to cases of what is now termed leuco-erythroblastic anaemia, with clinical or post-mortem evidence that a greatly damaged haemopoietic activity of the bone marrow has been supplemented by extramedullary haemopoiesis in the spleen and probably liver ("megakaryocytic" splenomegaly and megakaryocytic hepatomegaly) and possibly in lymph glands. It will, however, be convenient to exclude those cases in which the failure of medullary haemopoiesis is due to carcinomatous infiltration or other neoplastic destruction of the bone marrow. The term "leukanaemia" would then be restricted to cases in which the bone-marrow failure is due to myelophthisis or fibrotic change (myelofibrosis, if this hybrid name is permissible) or to any kind of "myelosclerosis" in which the bone marrow is gradually destroyed or replaced by non-neoplastic endosteal osteoid or osseous formation. The term "myelo-osteosclerosis" would distinguish such cases of *bony* myelosclerosis from "myelofibrosis."

A typical example of "leukanaemia," in the sense in which I propose to retain the term, was that which I described in 1904 under the heading "A Case of Leukanaemia with Great Hyperplasia of the Spleen and Prevertebral Haemolymph Glands and with Increase of Connective Tissue in the Bone Marrow" (*British Medical Journal*, 1904, 1, 1416, and *Trans. path. Soc. Lond.*, 1904, 55, 288). The patient was a man aged 58 years admitted to hospital suffering from great anaemia, progressive weakness, anorexia, and tinnitus. These symptoms had developed during the last twelve months; in fact, he had apparently been able to insure his life about one year before admission. He had lived in England since 1865 and had never had malaria or been out of Europe. Together with the leuco-erythroblastic anaemia there was great enlargement of the spleen and liver. At the necropsy the marrow of the shaft of the left humerus was carefully examined and found to have undergone transformation into a red substance of unusually firm consistence. This myelofibrosis was confirmed by microscopical examination. In sections of the spleen, liver, and kidneys there was absence of any reaction for free iron such as is found in pernicious anaemia. I concluded: "It is very tempting to suggest that the spleen (haemal gland) and the prevertebral haemolymph glands were actively engaged in supplementing the erythrocyte-forming functions of the diseased bone marrow." I alluded also to what French authors (as Vaquez and Aubertin) termed "anémie splénique myéloïde." In a later paper (*Med. Pr.*, 1928, 176, 174) I recorded another report, by Sir J. C. G. Ledingham, who kindly made a microscopical examination of the organs from my case after the one which I had reported. He drew attention to the peculiar type of myeloid transformation in the liver. "There were," he said, "numerous areas of veritable marrow, with extraordinary numbers of megakaryocytes, which occasionally showed mitosis. Some of the megakaryocytes were so large that they would not possibly have passed through the fine interacinous capillaries."

I borrowed the term "leukanaemia" from W. von Leube and from Arneth's haematological account of von Leube's case (*Dtsch. Arch. klin. Med.*, 1901, 69, 331) and H. Luce's paper (*Ibid.*, 1903, 77, 215), though my case was not exactly similar. I suppose now that my case must be classified among the cases of myelofibrosis of uncertain aetiology, with resulting sympto-

matic leuco-erythroblastic anaemia. G. Carpenter and C. M. Flory (*Arch. intern. Med.*, 1941, 67, 489) have headed a recent paper: "Chronic Non-leukaemic Myelosis: Report of a Case with Megakaryocytic Myeloid Splenomegaly, Leuco-erythroblastic Anaemia, Generalized Osteosclerosis, and Myelofibrosis." As explained by L. A. Erf and P. A. Herbert (*Ann. intern. Med.*, 1944, 21, 863), myelofibrosis is not of course synonymous with aplastic anaemia. The bone marrow in the former is fibrotic and in the latter it is fatty. Extramedullary haemopoiesis exists in the former but not in the latter.

An important clinical point is that in "leukanaemia," as I propose to limit the term, splenectomy is, as has been often pointed out, absolutely contraindicated, because the enlarged spleen (part of the conservative mechanism of extramedullary haemopoiesis) is helping to keep the patient alive.

Incidentally, I should like to know whether the condition of "polyostotic focal fibrous dysplasia" (in which I would include cases of "Albright's disease") ever leads to a condition of leuco-erythroblastic anaemia, in fact, to leukanaemia, in the restricted sense of the term which I advocate. Another question: Can there be gelatinous degeneration of bone marrow, such as is occasionally met with at post-mortem examinations, which is not merely a *paulo-ante-mortem* phenomenon but may allow the patient to live long enough to develop a resulting condition of myelofibrosis?—I am, etc.,

London, W.1.

F. PARKES WEBER.

Pelvic Sympathectomy

SIR,—I was interested to read that Prof. J. P. Greenhill (Nov. 29, p. 859) advises pelvic sympathectomy "in cases of endometriosis in which conservatism is advisable." I agree wholeheartedly. Indeed, I have practised this for some time, and in addition I suspend the uterus to prevent retroversion due to adhesions. But I do not think Prof. Greenhill's technique goes far enough. It should be noted that he describes his operation as "Pelvic Sympathectomy" and not "Presacral Neurectomy." But he does not completely denervate the ovaries, and since endometriosis so frequently involves the ovaries it is very important to include them. Your annotator in the same issue mentioned this point with reference to the work of O'Donel Browne (1939) in the treatment of ovarian dysmenorrhoea.

Mitchell (1938) summarizes the nerves to the ovary as follows: (a) A superior group from the intermesenteric nerves and from the renal plexus. (b) A middle or intermediate group from the superior hypogastric plexus or from the hypogastric nerve. . . . It is possible that the nerve supply to the ovary may be mainly sympathetic in nature, and confined to those nerves described above as the superior and middle ovarian nerves. The inferior ovarian nerves supply filaments both to the uterus and tubes but few (if any) to the ovaries." Therefore in addition to presacral neurectomy I feel it advisable to incise the infundibulo-pelvic ligaments to complete the pelvic sympathectomy. In many cases of endometriosis this will be necessary on one side only, because pathology in the opposite ovary has already necessitated its removal.—I am, etc.,

Oxford.

G. GORDON LENNON.

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A Medico-Nursing Society

SIR,—It is only in recent years that the importance of post-graduate medical education has received appropriate recognition. As far as nurses are concerned, however, such education is neglected and sometimes even ignored. The problem of maintaining the interests of nurses alert and up to date is not less urgent than the similar problem in relation to doctors. When I arrived at St. Bernard's Hospital as Deputy Medical Superintendent, after several years away in the R.A.M.C., a number of senior nurses requested my help in keeping their knowledge of modern developments in psychiatry and nursing abreast of the times. I found the matter presented many difficulties, such as the fact that the majority of senior male nurses and a large number of the female ones live out of hospital, most of them being married and having family obligations. After due consideration I concluded that a mere series of lectures would not in itself suffice. I sought to devise a scheme that would attract