tunity of studying a case which has super-
vened on Klinefelter's syndrome.—I am, etc.,

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Vestibular Nerve Section in Ménière's Disease

SIR,—I think one or two comments must be made on Mr. M. A. Falconer's moderate and well-reasoned article in the *B.M.J.* (30 January, p. 269).

In the first place, I doubt whether anyone else in England could have written this article. The two patients described in detail were referred by Sir Terence Cawthorne, and it is well known that he sees a large number of patients suffering from Ménière's disease, and that his practice in this respect is probably the largest in the country. In such a large number of patients there must, of necessity, be a small number which defy treatment. In the second place, Mr. Falconer discounts his own surgical skill. Division of the vestibular nerve may be difficult, and I know one case where the cochlear nerve was cut in an attempt to isolate and divide the vestibular division.

Mr. Falconer discusses the mortality of intracranial section of the vestibular nerve, and this is enough to make everyone pause, for untreated Ménière's disease is never fatal. It is quite true that a small number of cases of Ménière's disease do not respond to rest, nor to medication. It is questionable, however, whether the solution lies in labyrinth destruction, or in the more dangerous procedure of division of the vestibular nerve. The future may show that temperament and mental upset play a large part in vertigo, and that the change in the labyrinth is merely a secondary effect.

In Mr. Falconer's article a full account is given of the history of nerve division. I hope that both the surgery of the labyrinth and the vestibular nerve will soon be displaced into the historical section of a chapter on Ménière's disease, and it is to be hoped that Mr. Falconer will agree with me.—I am, etc.,

WILLIAM MCKENZIE.

Royal National Throat, Nose,
and Ear Hospital,
London W.C.1.

Post-mortem Caesarean Section

SIR,—Dr. T. J. Kirkpatrick (6 February, p. 381) says that this operation is rarely performed; so a brief description of a similar incident may be helpful.

About two years ago I carried out a post-mortem section on a woman who died in a medical ward about four weeks before term; she had bacterial endocarditis, diabetic coma, cerebral embolism, chronic nephritis, and irreversible hypotension. The foetal heart had not been heard with any certainty for some hours before death; and a number of potent drugs had been given to the mother in an attempt to save her life.

The operation had been foreseen, and a scalpel was discreetly to hand. The time elapsing from the mother's death to the extraction of a baby (stillborn, alas, with slight evidence of early maceration)—was 3½ minutes. Thus an operator with no experience of abdominal operations was able to extract the baby in reasonable time; this may encourage those who feel diffident about performing this operation because they have no surgical expertise.

Incidentally, is it really necessary to stitch the wound up again? Mothers dying in such circumstances nowadays should surely always have a post-mortem performed later; in which case the incision would be reopened. The time spent suturing is surely better devoted to the baby, if it is alive.—I am, etc.,

Lowestoft, Suffolk.

M. P. CARTER.

SIR,—In view of your correspondence on post-mortem caesarean section the following case may be of interest.

A Malay patient, aged 28, was under my care in December 1959. She was a gravida 2, having had normal deliveries at home and no previous

medical care. Her last menstrual period was unknown. Antenatal examination revealed aortic stenosis and incompetence and twin pregnancy. She was admitted to hospital. She developed minimal signs of congestive cardiac failure shortly before going into labour in the night of 5 January 1960.

On 6 January at 2.15 p.m. vaginal examination showed a thin rim of cervix only. She was at this time on continuous oxygen. She became acutely distressed and died at 2.30 p.m. Diagnosis of death and attempts at resuscitation took some time. The diagnosis was confirmed by retinal changes. I observed foetal movements and performed a classical caesarean section with a scalpel blade (there was no handle to be found.) Live male twins were extracted; they were full term and of about 6 lb. (2.7 kg.) weight. In view of the circumstances they were not weighed. No resuscitation was required despite delivery 30 minutes after maternal death. They were later discharged without any evidence of abnormality.

The hardest decision was a definite diagnosis of maternal death, and my personal feelings were of distress at the loss of the mother rather than of success in the achievement of live delivery.—I am, etc.,

Leicester.

T. GLYN-EVANS.

Chromosomes in Carcinoma of the Cervix

SIR,—In their article on cytogenetic abnormalities in carcinoma-in-situ and dysplasias of the uterine cervix Mr. M. M. Boddington, Dr. A. I. Spriggs, and Dr. M. L. Wolfendale (16 January, p. 154) have demonstrated the frequent occurrence of chromosomal abnormalities in precancerous lesions of the cervix. It is clearly desirable that further data be obtained in an attempt to correlate the chromosomal findings with the histopathological stage of the disease. An obvious difficulty is that the removal of tissue for cytogenetic studies may reduce the histopathologist's chances of determining whether stromal invasion has occurred. We wish to report some interesting findings on an *in-situ* carcinoma showing early invasion, using a technique which avoided cutting into the tissues; evidence for clonal development

was obtained in the form of a marker chromosome which was present in many of the metaphases.

Mrs. D. T., aged 30, complained of sterility, and slight post-coital bleeding for six months. Following a positive smear, a cone biopsy was performed. Before fixation, the cervical canal was very gently scraped with a narrow metal spatula, whilst Earle's solution containing 0.2 µg. Colcemid per ml. was allowed to drip over the scraped area. A cell suspension was thereby obtained which was incubated at 37° C. for 45 min.; the cells were then exposed to hypotonic saline before fixation and subsequent spreading on slides by air-drying, as in the standard leucocyte-culture technique. On subsequent histopathological examination (Dr. M. H. Bennett) extensive *in-situ* carcinoma was found involving most of the endocervical canal, with several areas of definite early squamous carcinoma.

Metaphase with 44 chromosomes, including the marker (M). The dicentric (D) was not seen in other metaphases.

53 metaphases were found in preparations from the cell suspension. 13 were poorly spread. 38 of the remaining 40 were seen to contain a large subacrocentric marker chromosome (see Figure). Only two metaphases (both of which had 48 chromosomes) unambiguously lacked the marker. All the metaphases were near-diploid except one which was near-tetraploid.

The patient has now undergone a hysterectomy and we are examining chromosome preparations from (a) endometrium close to the internal os, and (b) an apparently normal pelvic lymph-node; both of these have so far yielded only normal metaphases.

Clonal development in frank malignancies and their metastases has been known for a long time. Although we cannot be sure at the present time that all the cells comprising the lesion which we have examined contained the marker chromosome, it is evident that considerable clonal development has already taken place. Our observations not only make it reasonably certain that the marker chromosome arose before the onset of invasiveness, but place the time of appearance of the chromosome abnormality as simultaneous with that of the appearance of the carcinoma-in-situ, the former being possibly but not necessarily the cause of the latter.

Among the malignant tumours of the cervix and other sites that we are studying,¹ several have marker chromosomes which are present in the great majority of tumour metaphases. An adenocarcinoma of the corpus uteri having a marker chromosome which was seen in almost all the metaphases was described by Wakonig-Vaartaja.² Even in tumours lacking markers a comparison of different metaphases frequently suggests that they all arose from a single cell having an abnormal karyotype.—We are, etc.,

N. B. ATKIN.

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Training of Surgeons

SIR,—It is very encouraging to read that the Vice-President of the Royal College of Surgeons of England (6 February, p. 380), considers that the College has already done much to improve the supervision and training facilities given to young surgeons in hospitals throughout the country.

It would be more illuminating, if we knew how often the College inspects hospitals once they have been recognized, as the changes which are taking place so rapidly in medicine to-day alter the character of individual hospitals often out of recognition. Also it would be interesting to know what is considered to be proper supervision of the trainee, how much time is "adequate time for study," and what are suitable library facilities. Perhaps Mr. C. Naunton Morgan will tell us how the College is going to ensure that the young men in training will no longer be "used simply as a pair of hands."—I am, etc.,

Wigan, Lancs.

J. F. PATRICK.

SIR,—The new regulations for the final F.R.C.S. examination (23 January, p. 245) are definitely good from the viewpoint of

training. But how far will overseas students be benefited? Most of them never get a chance to work in a teaching hospital or in a hospital situated in a good teaching centre such as London, Glasgow, or Edinburgh. Hence they have to go to peripheral hospitals for training. Some of these are of a high standard, but some are hopelessly substandard (though recommended for F.R.C.S.) and the overseas students are used as a pair of hands. They have to learn everything at these hospitals, and, though they may pass the F.R.C.S. examination, they will not be good surgeons because their training has been substandard.

In my opinion the new regulations will make the F.R.C.S. more difficult for overseas students, and will not necessarily help them to get a good training in surgery.—I am, etc.,

Freedom Fields Hospital,
Plymouth, Devon.

S. K. SIL.

Plantar Warts

SIR,—Some years ago when clinical assistant in dermatology at Southend General Hospital I collected data concerning barefoot activity of children attending for treatment of plantar warts. As a control I collected the same data from other children attending the department and who were not suffering from plantar warts.

There were 128 children in the plantar-wart group, and 61 in the other group. The results are given in the Tables. Although the numbers are small, they show that more patients with plantar warts used the showers and/or swimming-baths than those without plantar warts. The small numbers doing barefoot gymnastics only were about equal in both groups. More significantly, perhaps, was the fact that in the "wart" group only

TABLE I.—Details of Subjects Studied

	Patients With Plantar Warts	Patients Without Plantar Warts
Total No. of cases ..	128	61
Males	55	30
Females	73	31
Age range (years) ..	6-18	4-17

TABLE II.—Incidence of Plantar Warts

No. in Bare Feet	Patient With Warts	Patients Without Warts
Gym. only	4 (3%)	3 (5%)
Showers only	10 (8%)	1 (1.5%)
Swimming-bath only ..	33 (26%)	11 (18%)
Swimming-bath and showers	43 (33.5%)	10 (16.5%)
Gym. and swimming and showers	13 (10%)	4 (6.5%)
Gym. and either swim- ming or showers ..	9 (7%)	11 (18%)
All cases doing swimming and/or showers ..	108 (77.5%)	37 (60.5%)
No barefoot activities ..	16 (12.5%)	21 (34.5%)

12.5% did no barefoot activities, compared with 34.5% in the "no wart" group.

It seems possible, therefore, that barefoot activities, particularly those connected with water, such as using swimming-baths and showers, may be associated with a higher incidence of plantar warts.—I am, etc.,

London W.9.

O. MORTON.

Conservatism in Obstetrics

SIR,—As one who has spent the greater part of his postgraduate life—except for the duration of the two world wars—on the teaching staffs of medical schools in Great Britain, the U.S.A., and South Africa, I have read with particular interest your leading article on "Forceps Delivery," published in the *B.M.J.* of 26 December (p. 1610).

Nothing has impressed me more during a long life associated with the practice of obstetrics and gynaecology than the benefits of conservative teaching of that subject, both in Dublin and Edinburgh. In Dublin, Hastings Tweedy, the Master of the Rotunda Hospital, used to teach: "Doctors come from all parts of the world to the Rotunda Hospital, Dublin, to learn how to put on forceps. We teach them *not* to put on forceps." In Edinburgh, where rickets and contracted pelvis were so common, the teaching of conservative obstetrics was so efficient that it was not uncommon for a medical student to complete his medical training without having seen a caesarean operation performed, while forceps were sparingly used.

As such a large proportion of medical students go into domiciliary practice your leader suggests the question whether medical schools of to-day emphasize sufficiently the importance of conservatism in the practice of obstetrics.—I am, etc.,

Claremont,
Cape, S. Africa.

R. LANCE IMPEY.

Dentures in Schoolchildren

SIR,—With reference to Mr. M. C. Rosen's comment on my figures of the dentures supplied to schoolchildren (26 December, p. 1662), I misread a column from the *Daily Telegraph* on this. The full particulars from the Ministry of Health, via the British Dental Association, are now available. They show that for people of 20 years of age and under during 1963, 5,440 were furnished with complete upper and lower dentures (including 640 replacements). Courses of treatment were given to 84,330, which included the provision of partial dentures. To these 89,770 must be added 11,320, mostly partial, afforded to pupils by the school dental service, plus further dentures given under the hospital and specialists services. An unknown number would additionally be obtained through private dental practitioners.

These figures emphasize poignantly the shocking malnutrition in our welfare state, leading to such a dental scourge in the young, and to equal or worse ones in older people.

As mentioned in the original letter (21 November, p. 1332), evidence points to the culpability of excessive refined carbohydrates in caries, obesity, coronary thrombosis, peptic ulcer, diverticulitis, haemorrhoids, and four million with varicose veins. Surely we, as a profession, by precept and example, should sound and sustain the alarm on the perils of refined sugar, sweets, and white flour.

If some would visit undeveloped territories, they would receive the shock I did in the Zululand Reserve in Natal on seeing mouth after mouth of gleaming, symmetrical, uninterrupted, unfilled teeth. After being conditioned to British oral cavities it was a