said that she had swallowed her dental plate at about 2 p.m. the same day. She could feel it in her throat. X-ray pictures were reported by a consultant radiologist "no foreign body is seen." On clinical examination it was obvious that the denture was impacted in the upper oesophagus. At oesophagoscopy at 5 p.m. the dental plate

was seen lying transversely in the oesophagus. It was firmly impacted. It was impossible to rotate the foreign body so that it could be extracted in one piece, as the hooked corners were firmly embedded in the oesophageal wall. With considerable difficulty the plate was broken and removed in four pieces. The photograph shows a duplicate plate and the four pieces of the swallowed denture (see Fig.). During the course of instrumentation the right upper premolar was loosened and was therefore removed. The patient was given antibiotic cover and remained on sterile fluids for 48 hours. She made a rapid but somewhat uncomfortable recovery.

There are two reasons for reporting these cases. Firstly, with the hope that our dental colleagues will be encouraged to manufacture dental plates from radio-opaque material, and, secondly, as a warning for hospitals with x-ray departments open directly to general practitioners. A negative x-ray report is likely, even if a barium swallow is carried out, as these plastics are not only radio-translucent but the nature of their surfaces prevents adherence of barium particles. A clinical examination might not be performed if the patient is referred direct to a radiologist and not from a casualty or ear, nose, and throat department. The negative radiological findings might possibly cause dangerous delay in removal of this foreign body.—I am, etc.,

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Truro, Cornwall.

Large-bowel Obstruction

SIR,—In the 17 April (p. 1040) issue of the *B.M.J.* Dr. M. A. Feldman gave an interesting case report of large-bowel obstruction caused by urinary-bladder distension. I am sure Dr. Feldman would be interested that this phenomenon has been noted before in two patients, and was briefly discussed by the undersigned in a publication entitled "The Practice of Surgery in a Neuro-psychiatric Hospital."¹ In this same paper, while noting that a large distended bladder

can cause large-bowel obstruction, it was further noted that the obverse can occur—namely, that large-bowel distension in patients with megacolon can cause urinary retention.—I am, etc.,

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REFERENCE

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Duodenal Obstruction

SIR,—I think that the lesion in Mr. H. Sheikh's patient (12 June, p. 1539) is more likely to have been a duodenal obstruction, of unknown cause, rather than due to acute pancreatitis, since the serum amylase was normal.

I presented a similar case to the Royal Society of Medicine (Clinical Section) in March 1961.

This was a man of 48 with acute metabolic alkalosis producing tetany due to vomiting from duodenal occlusion. Gastrografin film showed the obstruction to be in the horizontal duodenum. At operation the duodenum was widely dilated in two sections—one, stomach-width to the base of the mesentery; the other to the attachment to the ligament of Treitz. Biopsy of the duodenal wall was normal (no ischaemia despite the green-black discoloration and more than a week's history) and no intraluminal block was present (duodenum opened). A retrocolic gastro-jejunostomy was performed.

There is much confusion about this type of duodenal obstruction. "Chronic duodenal ileus" is probably the commonest name for it in Britain (it is not always chronic, and hardly ever an ileus). In the United States following Bockus's¹ massive classification of duodenal dilatation and stasis (32 sections of causes), arterio-mesenteric obstruction is the usual term used. Strong² showed that it was due to the narrowing of the lumen of the duodenum by the acute angle formed by the root of the mesentery (with the superior mesenteric artery) pressing against the right anterolateral aspect of the aorta, and to a high tethering of the distal duodenum at the ligament of Treitz. Section of this ligament produces relief.³

The post-operative films of my own case (see Fig.)—and I think that of Mr. Sheikh's patient also—shows the continuance of this vice at the root of the mesentery.

I am indebted to Dr. S. Karani and M. Joffe, consultants at St. Nicholas Hospital, Woolwich, for permission to publish case details.

—I am, etc.,

A. R. F. WILLIAMS

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Biochemical Findings in Suprarenal Adenoma

SIR,—I read with interest the report by Dr. Joyce Warner of the biochemical findings in suprarenal adenoma (26 June, p. 1654).

Whilst I agree that there has been some controversy as to the response of adrenocortical adenomata and carcinomata to corticotrophin,¹ I do not agree that in cases of Cushing's syndrome due to adenomata it is unusual to find an increase in urinary steroids following an infusion of corticotrophin.

When assessing the results of the dexamethasone-suppression and corticotrophin-stimulation tests in cases of hyperglucocorticism, I have been accustomed to regard normal findings as comprising: (a) *bilateral adrenocortical hyperplasia*—positive response to suppression and stimulation; (b) *adenomata*—no response to suppression, with response to stimulation (the latter finding occurring particularly in well-differentiated tumours such as the case described); (c) *carcinomata*—no response to either suppression or stimulation. Using these criteria, which find support in two standard texts,^{2,3} the case described would not be regarded as being unusual.—I am, etc.,

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REFERENCES

- 1 Logan, R. W., and McMillan, N. L., *Postgrad. med. J.*, 1964, **40**, 604.
- 2 Williams, R. H., *Textbook of Endocrinology*, 1962, third edition, p. 352. Saunders, Philadelphia.
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Persistent Infection by *Trichophyton megninii* in Leeds

SIR,—The only published clinical report of infection in Britain due to *Trichophyton megninii* Blanchard, 1896 (syn. *Trichophyton rosaceum* Sabouraud, 1909), is that published by Sarkany, Clayton, and Beck.¹ They described fingernail infection due to this species in two immigrants, one a native of Sicily, the other from Eastern Germany. Since then *T. megninii* has been isolated from another immigrant, an Italian (Miss G. Midgely, Institute of Dermatology, St. John's Hospital, London, personal communication, 1965). It is therefore perhaps of interest to record now the occurrence of another case of infection by this species, this time in Leeds, in a native of this city.

This patient, a woman 20 years old, presented at this Department on 20 July 1964 with a lesion on the left cheek below the left eye. This was erythematous, slightly scaly, somewhat raised, and circumscribed by a ring of vesicles. It measured 4.25 cm. in diameter, and was of six weeks' duration. The patient's history was not contributory. Scrapings from the lesion revealed mycelium, and on culture yielded *T. megninii*. The macroscopical and microscopical morphology was typical of the species. Furthermore, this strain demonstrated clearly, in two successive cultural tests, its absolute requirement for histidine on the synthetic basal medium devised by Georg for this purpose.² On this medium it is unable to produce any growth in the absence of histidine, whereas *T. rubrum*, which in many other respects it resembles, is able to grow well on this medium, irrespective of the presence or absence of histidine. This strain of *T. megninii* was sensitive *in vitro* at 27° C. to 10 µg./ml. of griseofulvin in Sabouraud glucose broth. For comparison with this strain, one of the isolates of *T. megninii* obtained by Dr. I. Sarkany and his colleagues at the Royal Free Hospital, London, was used in parallel series in these tests, and they were found to be similar in all respects.

Treatment of the patient was begun with fine-particle griseofulvin, in the dosage of 125 mg. four times daily. The lesion responded well at first to this drug, which was stopped only when the erythematous reaction had almost cleared, and scrapings were microscopically negative. Instead, ung. betnovate was prescribed. One week later, on 11 August 1964, the patient returned with three discrete circumscribed lesions within the area of the initial lesion (see Fig.) and scrapings from them were not only positive microscopically, but also on culture yielded *T. megninii* for the second time. Accordingly, fearing that the ung. betnovate had been responsible for its exacerbation, this drug was promptly withdrawn and griseofulvin prescribed again twice daily. However, despite these measures, the lesion remained active for another 22 weeks, during which period *T. megninii* was isolated from it for the third, fourth, and fifth times, respectively on 29 September and 30 November 1964, and on 26 January 1965. Then at three subsequent examinations, the last on 16 March 1965, scrapings were negative microscopically and on culture. By this date also, about eight months after the patient's first visit to this clinic, the lesion had completely cleared and she was accordingly discharged.

We are indebted to Dr. S. T. Anning for his permission to publish this report, to Dr. I. Sarkany for a culture of one of his isolates, and to Mr. R. A. Forster for technical assistance.

—We are, etc.,

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Varicose Veins in Pregnancy

SIR,—In your editorial entitled "Varicose Veins in Pregnancy" (3 July, p. 3) you quote K. Sigg as stating that varicose veins are three to four times commoner in multiparous women than in males and nulliparous women. I believe that the difference between the incidence in multiparous and nulliparous women is very much lower.

In a personal survey in general practice of 4,983 patients (2,222 male and 2,761 female), I found that 338 patients had either attended a doctor for varicose veins or had been found to have them on routine examination. The age at first complaint of these patients was sought and produced figures of some interest. The sex distribution of sufferers was 223 females to 115 males, a ratio nearer 2:1 than the 3 or 4:1 that you quote. The reason for this discrepancy may be that the males in this series were much less enthusiastic about seeking treatment than the females—possibly on cosmetic grounds. The distribution of nulliparous and multiparous females was as follows:

Age at first complaint in years	Nulliparous females	Parous females
15-20	1 (2.5%)	13 (7.1%)
20-30	3 (7.3%)	34 (18.7%)
30-40	15 (36.6%)	67 (36.8%)
40-50	10 (24.4%)	58 (34.6%)
50-60	6 (14.6%)	6 (3.3%)
60-70	5 (12.2%)	3 (1.6%)
70+	1 (2.5%)	1 (0.5%)

Thus 182 (81.1%) of the female sufferers were multiparous. But of the total series of 2,761 females 1,573 (74%) had borne children, and thus the likelihood of 182 suffering from varicose veins was no higher than might have been expected.

The explanation of the discrepancy noted seems to lie partly in the very different ages at which the two groups make their first complaint—for most of the patients attending out-patients for treatment do so before the age of 50 and this weighs the incidence in favour of the multipara—and partly in a failure to relate out-patient attendances to the actual incidence of the condition in the population at risk.

It may well be that pregnancy is not such an important aetiological factor as is thought, but is an accelerating factor in the development of symptoms.—I am, etc.,

Bromsgrove, Worcs.

M. DRURY.

SIR,—With regard to the leader (3 July, p. 3) on varicose veins in pregnancy the aetiological factors you quote are common to all pregnant women irrespective of race. You omit a later reference¹ that I submit qualifies those you give. Concerning their basic cause, in 1963 I visited the C. Johnson Memorial Hospital of 600 beds at Nqutu, Natal, to verify the reported absence of varicose veins, including those in pregnancy, in Africans living tribally. I saw no varicose veins, and was given figures from the hospital registers. These included 3,141 cases of pregnancy with no varicose veins of the legs, but 4 of vulval varicosities, and 1 of haemorrhoids. Later the Superintendent, Mr. A. Barker, F.R.C.S.,² produced records showing 5 cases of varicose veins in over 14,000 consecutive admissions. This must constitute a challenge to your leader with an incidence of around 10% in British women.^{3,4,5} I presented two supporting facts.¹ The first is that in U.S.A., whether in the Cook County

Hospital, Chicago, of the industrial north, or the Charity Hospital, New Orleans, in the agricultural south, varicose veins are as common in the coloured as in the whites. Surgeons tell me that they are also starting in the black residents of Durban and Port Elizabeth. The second is that the food of the tribal Africans in Natal consists mainly of cooked unrefined maize, which eliminates many factors that might be advanced as important. Their diet is so exclusively one of maize that deficiency diseases like kwashi-orkor are common. The unrefined diet gives a twice-daily stool which is soft and narrow in diameter, and is described locally as the tooth-paste stool.

In my article I considered that colonic stasis arising from a diet containing excessive purified carbohydrates—e.g., white flour and white sugar—leads to pressure on the iliac veins, and is the essential cause of the plague that varicose veins have come to be in westernized peoples. This applies to varicose veins in pregnancy which appear in the first three months, when constipation is often worse and the uterus is not an obstructive factor. In a letter to the *Lancet*⁶ I answered objections that were raised to this thesis. To those interested in varicose veins in pregnancy I suggest they will find the prescription of unprocessed bran, one to four tablespoonfuls daily, will correct the bowel stasis. I have advised it with advantage for years.

The treatment you seem to advocate has obtained from time immemorial—i.e., rest, elevation, and elastic stockings—these in spite of it having been shown that operation or Fegan's injections give worth-while results. A fundamental of varicose veins is that the reverse flow in them operates in the standing and recumbent position (at 1,000 operations, the bleed-back flow was observed in over 800, even though patients were anaesthetized and the table was tilted head down). The rest and elevation of the legs in these days of "do it yourself" is at best but a placebo, and is usually impracticable. Any patient who has varicose veins before or after pregnancy should have them treated, for they are a steadily increasing burden, and the process never "burns itself out." Patients and their practitioners are hesitant to seek treatment because the results are still disappointing. They will continue to be until a full and accurate diagnosis is made and the leak or leaks of high pressure from the deep into the superficial veins are stopped at their source, and stripping, which is fashionable, is relegated to the limbo of irrational operations. In pregnancy the conditions for operation are applied more stringently, but when a leak is clear cut and really troublesome the strategic ligature is done.—I am, etc.,

London W.1.

HAROLD DODD.

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Lung Cancer Among White South Africans

SIR,—Dr. Geoffrey Dean's figures for lung-cancer mortality rates of various categories of smokers among the white South