to an afternoon surgery. A general practitioner who holds no evening surgeries will force many patients to take time off work to visit his doctor instead of coming to surgery in the evening after work. I presume Dr. Smith prefers to fall in line with the working hours of branches of the medical service working "9 to 5" rather than with his junior hospital colleagues or the majority of general practitioners.—I am, etc.,

RICHARD E. G. SLOAN

London N.W.11

SIR,—In reply to Dr. R. B. Smith's letter (20 January, p. 177), for the past six years I have had afternoon surgery from 4-6 p.m., although my surgery is open for appointments to be made from 3 p.m. As far as I am aware this is to the satisfaction of all concerned.—I am, etc.,

E. M. ROSSER

London S.W.1

Ampicillin Rash and Influenza

SIR,—The high incidence (16·6%) of ampicillin rash in patients with proved viral infection of the respiratory tract reported by the Collaborative Study Group (6 January, p. 7) is of great interest and it raises important problems over the choice of antibiotic in pneumonia and bronchitis. Unfortunately, the authors did not give information about the types of virus which were isolated. However, their observation prompts one to wonder whether the current epidemic of influenza A virus infection has been accompanied by an increased incidence of ampicillin rash or whether this has been noted during previous epidemics.

I have recently seen a patient in whom influenza was complicated by pneumonia—the clinical diagnosis was confirmed by chest x-ray and a complement-fixing titre of 1/320 to influenza A virus. This patient, an active woman of 79 years had previously enjoyed excellent health. Signs suggestive of consolidation were noted about 12 hours after the first onset of typical symptoms of influenza. Ampicillin was given immediately in a dose of 500 mg 6-hourly by mouth and continued for eight days. Her temperature fell to normal within three days. On the 11th day she developed a low-grade fever and over the next two days a maculopapular rash appeared which coalesced until eventually hardly any part of her body remained unaffected by it. Apart from severe irritation, which was not relieved by antihistamine, she felt more ill than at any time during her initial illness. Whereas it had been possible to treat her pneumonia at home, the complication of the ampicillin rash made it necessary to admit her to hospital for continuous nursing care.

If there is, indeed, an increased liability to ampicillin rash in patients infected by influenza A virus, the choice of antibiotic when pneumonia or bronchitis complicates the illness will pose difficult problems. Ampicillin (alone or with cloxacillin or flucloxacillin) is widely advocated as the antibiotic of first choice in this situation, not only because many strains of pneumococci are now resistant to the tetracyclines, but also because of the risk of secondary staphylococcal infection.—I am, etc.,

IAN GREGG

London S.W.15

Digestive Disease: The Changing Scene

SIR,—In his Harveian Oration Dr. Thomas Hunt (23 December, p. 689) set forth changes that have occurred slowly over the past two centuries in Europe and during recent decades in Africa. In this oration the role of fibre was stressed. The change in fibre intakes in the British diet over the past century has revealed that the total mean daily intake of fibre has probably altered little from 1860 to 1970, but that the source has changed. Persons consume less fibre in their wheat flour and grain products but more fibre in fruit and vegetables.[1]

It is important to understand what we mean by the term fibre. Dr. Hunt refers to the roughage in our food as consisting of "crude fibre made up of cellulose, hemicellulose, pectins, and lignin." Unfortunately, the term fibre, more correctly called crude fibre, to a cereal chemist means the portion of the carbohydrate that resists hydrolysis by boiling first with sulphuric acid and subsequently with sodium hydroxide,[2] and as such is reported in certain food tables[3] but not in others.[4] Crude fibre contains all the lignin and most of the cellulosic substances, but the hemicelluloses have been extracted in the alkalies.[5] In most Western diets the hemicelluloses (pentosans) are usually twice as much by weight as the crude fibre (cellulose and lignin).[6] In wheat and most whole cereal grains there is far more hemicellulose than crude fibre; the ratio is 2:1 or 3:1. In fruit and vegetables the hemicellulose content is far less than that of crude fibre; the ratio is often 0·5:1.[5] There is considerable uncertainty about whether hemicellulose has any function in human nutrition. A prolonged search of the literature has not revealed any study either of its role in human nutrition or of its specific function in animal nutrition. No reports were found concerning its digestion in ruminants,[7] this is surprising, considering the large amount of study of the role of fibre-rich foodstuffs in animal feeding.

A recent inquiry for a complete bibliography concerning fibre and bulk-forming agents in the stools in the context of human nutrition (1950-70) failed to provide any reference at all to the numerous clinical studies on the possible role of fibre-depleted foods as factors in the pathogenesis of diverticular disease, cancer of the colon, or irritable colon. It also took no cognizance of the fact that the fundamental work had been done under the terminology of unavailable carbohydrates.[4-6] This might have been a satisfactory term until it was demonstrated that lignin is not carbohydrate and that cellulose and hemicellulose make a small contribution to calories.[6] The term "dietary fibre" was therefore proposed and defined to include the remnants of the vegetable cell walls unhydrolysed by human alimentary enzymes.[8 9] In the present state of knowledge dietary fibre is identical to the unavailable carbohydrates and lignin. No food table records dietary fibre, hemicelluloses, or pectic substances.

A recent review of bile salt metabolism produced evidence that fibre-rich foods increase bile salt excretion, decreasing thereby reabsorption in the small intestine.[10] If so, fibre-rich foods reduce serum cholesterol levels and might be one of the protective factors against coronary heart disease.[11]

A general review of the role of fibre in human nutrition is overdue. The whole terminology is antiquated: thus the term hemicellulose should be replaced by that of the various polysaccharides, mannas, xylans, glycuronans, and so forth.[12] It is as if we were talking still in terms of water-soluble and fat-soluble vitamins.—I am, etc.,

HUGH TROWELL

Woodgreen,
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Side Effects of the Pill

SIR,—It is unfortunate that Dr. D. A. Varvel (23 December, p. 729) should seek to castigate the contraceptive pill on the basis of his impressions rather than on factual evidence. The national press was not slow to disseminate his views, no doubt to the further discomfort of anxious patients. The occurrence of depression, loss of libido, headaches, etc., has been reviewed and reported relatively recently,[1] but perhaps the experiences of another general practitioner may be of interest.

For the past 10 years I have kept for each case in which I have prescribed an oral contraceptive a record of the patient's age, marital status and parity, the product and when it was first prescribed, specific symptoms volunteered or elicited at follow-up (see table), when treatment was discontinued, and the reason for discontinuing it. During this period a combined or sequential preparation was prescribed for 476 patients, 61 of whom never returned after their initial prescription, leaving 415 in the series. As in Dr. Varvel's experience, there were no serious sequelae and only one pregnancy resulting from pill failure (with a sequential preparation).

Overall Incidence of Symptoms in 415 Patients

	No.	%
None	137	33·3
Anxiety (overt)	27	6·5
General malaise	21	5·1
Depression	41	9·9
Headaches	37	8·9
Loss of libido	42	10·1
Breast symptoms	6	1·5
Nausea	17	4·1
Weight gain	50	12·1
Vaginitis	42	10·1
Oligomenorrhoea	28	6·8
Amenorrhoea	48	11·6
Spotting	16	3·9
Breakthrough bleeding	39	9·4
Other	29	7·0

Weight gain (defined as an increase of 10% or more) headed the list of symptoms. Apart from this, only amenorrhoea, monilial vaginitis, reduced libido, depression, breakthrough bleeding, and headaches occurred in the region of the 10% level. Some patients,

of course, complained of two or even more symptoms, but one in three complained of none at all. Of interest also is that the incidence of monilial vaginitis corresponded closely with that occurring in women in general,[2] though the impression was that (as with loss of libido, headaches, etc.) it occurred much more often in women taking the pill.

When I related to age group and parity (1) the number of patients complaining of no symptoms and (2) the number discontinuing the method because of symptomes the latter generally began to exceed the former after the age of 30, especially in patients with more than one child. These findings equate with the common experience that oral contraceptives seem to suit the yound nullipara better than the older multipara.—I am, etc.,

M. J. V. BULL

Oxford

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Corticosteroid Withdrawal in Asthma

SIR,—Beclomethasone dipropionate aerosol has recently been introduced as an alternative to corticosteroids or corticotrophin in patients with asthma. We wish to report two cases which illustrate the possible dangers involved in transferring asthmatics from systemic corticosteroids to the beclomethasone aerosol. One patient was admitted in status asthmaticus and the other developed symptoms of acute adrenal insufficiency.

Case 1.—A woman aged 47 with extrinsic asthma for nine years had been treated with corticotrophin 10-20 units daily for the past two years. She was grossly Cushingoid. Before starting treatment with beclomethasone her plasma cortisol was 11 μg/100 ml and after tetracosactrin stimulation it was more than 30 μg/100 ml. Her asthma was well controlled by beclomethasone and the corticotrophin was withdrawn. Six weeks later she began to wheeze. She had been advised to take her reserve supply of prednisone under these circumstances but she did not do so, as she feared the return of her Cushingoid appearance. Three days later she was admitted, grossly cyanosed, in status asthmaticus; her arterial Po_2 was 24 mm Hg. She had no signs of adrenal failure. After treatment with intravenous hydrocortisone and aminophylline together with antibiotics and oral prednisone she made a slow recovery.

Case 2.—A man aged 23 had had extrinsic asthma for 20 years. He had received prednisone 10 mg daily for eight years. His asthma was satisfactorily controlled on beclomethasone and his prednisone was gradually reduced. While still taking prednisone 10 mg daily his plasma cortisol was 2 μg/100 ml, and after tetracosactrin stimulation it was 3 μg/100 ml. Four weeks after prednisone had been withdrawn he developed a cold. He did not have purulent sputum but he became weak and drowsy. He complained of abdominal discomfort and vomited. On admission to hospital he was confused and had gross muscular weakness. He had no wheeze and his peak flow was unchanged at 400 l./min. He had no abdominal signs. His blood pressure was 110/70 mm Hg (previous readings had been 130/90 mm Hg). His serum sodium was 126 mEq/l. and serum potassium 3·5 mEq/l. His plasma cortisol was 7 μg/100 ml. He received intravenous hydrocortisone and saline and recovered fully within 12 hours.

This report emphasizes the potential problems arising when long-term corticosteroid therapy is discontinued. Our patients receiving beclomethasone are given a reserve supply of prednisone with instructions to use it and contact their doctor immediately if their asthma deteriorates or they feel unwell. In addition, they are told to continue to carry their steroid card together with a letter which mentions the risk of status asthmaticus and adrenal insufficiency. We have also warned their general practitioners that these patients are at special risk.—We are, etc.,

J. C. BATTEN
S. W. CLARKE
IAN GREGG
MARGARET E. HODSON

Brompton Hospital,
London S.W.3

Paralytic Ileus in Strongyloidiasis

SIR,—It was with great interest I read the account by Dr. J. B. Cookson and others (30 December, p. 771) of a case of strongyloidiasis, though I felt there were some inconsistencies in their report. Although the infestation may well have produced a paralytic (adynamic) obstruction as an end result (as the barium meal and laparotomy findings suggest) it seems that the obstruction was initially dynamic in nature since the patient complained of abdominal pain, and bowel sounds were heard on abdominal auscultation. Clinically, therefore, it would appear that the obstruction was initially dynamic—an enteric paralysis resulting from myenteric fatigue. This is the end-stage of dynamic obstruction of any origin and possibly not a specific immediate effect of strongyloidiasis, as the title of this paper would suggest.—I am, etc.,

M. J. WORLD

Stevenage, Herts

Colleagues in Africa

SIR,—The letter from Dr. A. Barlovatz (16 December, p. 670), who writes after a lifetime of service in Zaire prompts me, a newcomer to the Zairois scene to point out that the picture he gives is certainly *not* uniform throughout the country. His figures underline the grave shortage of medical personnel and the very great need for expatriate doctors for many years to come, and I am sure that no Zairois, whether medical or lay, would like the impression to be given that expatriate doctors are no longer welcome.

Unlike the situation in England, a large proportion of doctors in Zaire work in administrative posts, and it is not surprising that all these should go to national personnel. However, there are many areas like the one served by this Hospital, where I am the only doctor along a 150-mile (240-km) stretch of road with a population of 100,000 people who would "fête" any doctor of whatever nationality willing to serve them. Many such hospitals are now without even *one* doctor (a similar population in England has 150 doctors)—as this one will be unless a replacement is soon found for my furlough.

Of course, there are many problems confronting a foreigner in a newly independent state, even in a mission hospital (the church, too, is newly independent!). However, I can say that never has any Zairois interfered with a clinical decision of mine and not often in a policy decision either. The county authorities have generally been very helpful and only today I received a letter thanking me for the new work we are undertaking against leprosy. The two nearest Zairois doctors have both stayed in our house and there is a cordial relationship. I have also been asked twice to organize elective periods for final-year students from the national medical school, though this has unfortunately not been possible owing to pressure of other commitments.

Zaire cannot offer you a lifetime's career in medicine. Such prospects now must obviously go to Zairois doctors. BUT she *does* offer, in hundreds of places, challenging opportunities to do worthwhile work, immeasurably appreciated by the local population, for short and medium terms and innumerable opportunities for "Burkitt-type" research too. You don't have to publish in Zaire itself!—I am, etc.,

D. K. MASTERS
Medical Director

Pimu Missionary Hospital,
Lisala,
Zaire

Toxicity of Benorylate

SIR,—Recently a new antirheumatic medicine, Benoral, was produced and widely advertised as useful for arthritis and allied forms of rheumatism. It contains 40% w/v of benorylate (4-acetamidophenyl O-acetylsalicylate). I prescribed a course in the recommended dosage for 11 of my patients, of whom eight were unable to persist with the treatment because of toxic symptoms. One of three who completed the course derived some benefit from it. The toxic symptoms included a dramatic loss of hearing, tinnitus, nausea, and a feeling of disorientation. These are the classical symptoms of salicylate toxicity and are remarkable only because of the speed with which they occurred and the acute form in which they presented. Several of the patients developed the symptoms after the second dose of Benoral and few could take more than four doses. After they had recovered from their symptoms (in about 48 hours) I persuaded several of them to resume on half doses but all had to stop because of deafness or tinnitus.

I have reported these cases to the manufacturers. It would be valuable to know if others using this preparation have had a similar experience.—I am, etc.,

R. EDGAR HOPE-SIMPSON

Cirencester, Glos.

Cervical Carcinoma in Young Women

SIR,—I would like to report two cases of cervical carcinoma in situ found on routine testing of young women in the past three months in a general practice of 4,000. This high incidence is contrary to the official view that cervical carcinoma is a disease of middle age.

The women are aged 27 and 21 respectively, both are on "the pill," and the first reports showed non-specific inflammation. Although no repeat smear was recommended by the pathologist this was done six months later and carcinoma in situ was reported.