

female, but in male patients these clinical clues could have some diagnostic value.

But ultimate diagnosis must depend on full investigation with electromyography, serum enzyme studies, and muscle biopsy. The distinction is important, because Duchenne muscular dystrophy is invariably a progressive and fatal disorder. In some patients with spinal muscular atrophy the disease may undergo temporary or even prolonged arrest, and often the prognosis is better than it is in cases of the Duchenne type. Furthermore, an accurate diagnosis is needed for genetic counselling, as the sisters of boys suffering from Duchenne dystrophy may possibly be carriers of the X-linked gene, whereas unaffected sibs of a child with spinal muscular atrophy of autosomal recessive inheritance are unlikely to pass on the disease to their offspring unless they marry a blood relation.

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## Does Crohn's Disease Predispose to Intestinal Cancer?

It is a well-documented fact that long-standing ulcerative colitis predisposes to the development of carcinoma of the large intestine.<sup>1</sup> This risk has to be taken into account when considering the practical management of patients suffering from colitis.

It is natural to ask whether the other common inflammatory condition of the intestinal tract, Crohn's disease, carries a similar potential for producing malignant tumours of the bowel. In a way it might be surprising if it did, for unlike ulcerative colitis, in which the inflammatory process is located predominantly in the mucosa, in Crohn's disease the maximal changes occur in the submucosa and deeper layers, though it is rare for the mucous membrane entirely to escape. But what counts is what actually happens in practice. There have been several attempts<sup>2-5</sup> to assess the frequency of intestinal carcinoma in Crohn's disease and determine whether the two conditions are causally related or not. Most of these studies have reached rather equivocal conclusions, but recently S. G. Darke and his colleagues<sup>6</sup> at the London Hospital have thrown fresh light on this debatable question.

Dealing first with carcinomas of the small bowel associated with Crohn's disease, Darke and his colleagues found that the average age at the time of diagnosis in 25 published cases was 46 years but that in a group of cases of small

bowel carcinoma unassociated with Crohn's disease it was 61,<sup>7</sup> a statistically significant difference. The distribution of the "Crohn's carcinomas" was different from that of spontaneously occurring carcinomas of the small bowel; the former occurred mainly in the lower ileum, the latter were more evenly located throughout the small intestine.<sup>8</sup> The incidence of spontaneously occurring carcinoma of the small bowel has been estimated at 0.3 per 100,000 population per year.<sup>9 10</sup> The prevalence of Crohn's disease at all sites in the intestinal tract has been put at 9 per 100,000.<sup>11</sup> The chances of the two conditions occurring together is thus no more than 1 in a thousand million. But in several large series of published cases of Crohn's disease of the small bowel the incidence of carcinoma averaged 0.3%.

As to "Crohn's carcinomas" of the large bowel, Darke and his colleagues found that there was no significant difference between the average age at diagnosis of these growths and that of spontaneously occurring colo-rectal carcinomas.<sup>12</sup> However, the distribution of these two forms of growth was dissimilar in that the Crohn's carcinomas were commoner in the proximal colon, the ordinary colo-rectal cancers in the distal colon and rectum.<sup>13</sup> As regards overall incidence, Darke and colleagues calculated from several sources<sup>14 15</sup> that the incidence of spontaneously occurring carcinoma of the large bowel is roughly 60 per 100,000 population. The prevalence of Crohn's disease of the colon and rectum is probably about 6 per 100,000.<sup>11</sup> The chances of a coincidental association of carcinoma and Crohn's disease of the large intestine is thus about 1 in 10 million. But the actual incidence of carcinoma in the colon and rectum associated with Crohn's disease averages 1.8% in published series.<sup>6</sup>

As a consequence of these observations Darke and his colleagues<sup>6</sup> consider that there is a small but significant risk of carcinoma developing, both in the small and in the large intestine, in Crohn's disease.

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## Starting Young

Though the dangers of cigarette smoking are plain enough to medical men they appear unconvincing to a large number of lay people. But if the young are ever to be deterred from starting the habit at least one necessity is for their elders to set a better example than many do at present. Children would not be human if they did not imitate adults. That plenty do so to become smokers even at the age of 10 is apparent from a recent report.

Armed with questionnaires based on Medical Research Council recommendations<sup>1,2</sup> Beulah R. Bewley and colleagues<sup>3</sup> approached 8,682 schoolchildren aged 10-11½ in Derbyshire. The children completed the questionnaires themselves in school with the consent of the teachers, and they were assured that nothing recorded would be disclosed to their parents or to the school authorities. The response rate was 82%. Those not completing the questionnaires included 11% who did not do so because parents or teachers refused permission and 6% who were away from school on the appointed day. The creditable total of 7,115 boys and girls replied, and of these 6.9% of the boys and 2.6% of the girls reported smoking at least one cigarette a week. In fact just under 1% of the boys admitted to smoking one or more cigarettes a day. There was no difference in the smoking habits of children from urban or rural schools.

Though by adult standards these numbers are small, they must cause concern when viewed against the age of the children, for they show that about one in twenty of these 10- and 11-year-olds have started on a habit that even highly motivated adults find exceedingly difficult to break. Bewley and her colleagues also found a correlation between the amount these children smoked and the existence of a cough. Regular smokers recorded coughing more than occasional smokers and these more than non-smokers. But at such relatively low levels of smoking it may be questioned whether the relation could be direct. Possibly variations in social classes may enter into the responses or variations in smoke pollution of the atmosphere have affected the children. The investigation could not entirely resolve these questions.

While this is said to be the largest study of smoking in children so young, a number of others have examined different aspects of children's smoking. Papers on the subject have accumulated, and the British ones are now conveniently reviewed in a publication issued jointly by the Social Science Research Council and the Medical Research Council.<sup>4</sup>

<sup>1</sup> Medical Research Council's Committee on Aetiology of Chronic Bronchitis, *British Medical Journal*, 1960, 2, 1665.

<sup>2</sup> Medical Research Council's Instructions for the Use of Questionary on Respiratory Symptoms, 1966. W. J. Holman Ltd., Dawlish, Devon.

<sup>3</sup> Bewley, B. R., Halil, T., and Snaith, A. H., *British Journal of Preventive and Social Medicine*, 1973, 26, 150.

<sup>4</sup> Bewley, B. R., Day, I., and Ide, L., *Smoking by Children in Great Britain*. Research Publications Services Ltd., Victoria Hall, Fingal Street, East Greenwich, London SE10 0RF (50p including postage).

## Orthopaedic Training in Developing Countries

The training required for surgeons to work in developing countries must take place mainly in those countries. And it is scarcity of resources and of experienced teachers that presents one of the greatest problems there.

These were the main conclusions of a symposium held at Oxford on 12-15 September under the sponsorship of the National Fund for Research into Crippling Diseases. One of the great difficulties in the developing countries, as the symposium heard, is the impossibility of separating service needs from education needs, even though these are often in conflict. Another source of conflict is between the needs of the politically conscious urban élites and those of the great majority of their countrymen. Powerful minorities in the cities demand the latest Western medical care in all special-

ties, while huge urban and rural populations receive little more than basic medical care, if that. Nor is it only glamour and riches that attract surgeons in developing countries to their cities. Satisfaction in doing the job for which they have been trained is at least as important, and the search for this also persuades too many skilled physicians and surgeons to emigrate to more advanced countries. The brain drain today is much more harmful to the developing countries than it ever was to Great Britain.

There was general agreement in the symposium that the pattern of orthopaedic disease in the developing countries is such that the training of orthopaedic surgeons for work there must be carried out mainly in those countries. The number of Western orthopaedic surgeons with any experience of bone tuberculosis, of poliomyelitis, and of chronic osteomyelitis, not to mention leprosy, is fast declining, yet these are the outstanding non-traumatic orthopaedic problems of Asia, Africa, and South America. The prevalence of these diseases limits the use of younger British and American surgeons as teachers, for they have seen little of them. Though the pattern of disease may be changing and becoming more like that of Britain and the United States, it is doing so very slowly indeed in some of the larger emergent countries. The symposium therefore agreed that the best immediate contribution the developed countries could make would be to supply senior, experienced teachers to go overseas and teach in the countries they were helping. These people should stay there for at least six months and preferably for some years. Shorter, prestige visits by eminent surgeons from the West were appreciated and regarded as valuable, but not nearly so valuable as the really long stay.

At present, the symposium considered, basic training in orthopaedic surgery for the developing countries should not be given to their young men in Britain or the U.S.A. Exposure to the "surgery of affluence" before they had been taught how to handle the needs of their own people was considered inappropriate. The young trainee should come to the West at the end of his training and should be attached to special higher-training programmes, preferably in more centres than one. He should not be used as a pair of hands in the less popular posts in the country that he visits. Despite some support for the suggestion of training assistant-physiotherapists to help with the simpler routine duties, it was agreed after reflection that the provision of substandard grades creates many more problems than it solves. Exchange programmes of younger men within the developing countries themselves were recommended, and it was appreciated that the needs of developing countries in these respects were by no means uniform.

The conference owed its inspiration to Professor R. L. Huckstep, recently of Makerere University, Uganda, and now working in Sydney, and to Mr. A. L. Eyre-Brook, of Bristol, the immediate past-president of the British Orthopaedic Association. Of its 39 delegates nine came from Britain, six from North America, one from Australia, and the others from Africa, Asia, and the West Indies. As well as orthopaedic surgeons there were representatives of general surgery, nursing, and physiotherapy. It decided not to set up any sort of committee but agreed that all who attended the symposium should write annually to the other members of the conference to report progress and state new or changing difficulties. These letters will form the basis of another such conference, probably in an Asian or African centre, in three or four years' time. The Commonwealth Foundation