EDITORIAL

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Seventeen years have elapsed since Crohn claimed to have isolated 'regional ileitis' as a specific clinical entity whose successful treatment in the very large majority of cases carried the hazards of an intestinal resection. Since that time its clinical individuality has been accepted by well-informed surgeons all the world over, and there is now an acute 'awareness' among clinicians of its not infrequent occurrence and protean manifestations.

Since 1932 it has been recognized that an occasional case of Crohn's disease is encountered for the first time as an abdominal emergency closely simulating acute appendicitis. The affected segment shows every external appearance of florid acute inflammation with intense capillary hyperaemia and a subserous sero-fibrinous exudate. These cases show a remarkable tendency to spontaneous healing and it is highly probable that progression to the subacute or chronic phase of the disease is limited to a small minority of them. Resection in this stage carries a high mortality and conservative treatment with constant clinical supervision and repeated X-ray studies is now strongly advocated. This tendency of the initial lesion of Crohn's disease completely to heal itself was deduced on purely histological evidence by Blackburn, Hadfield and Hunt in 1939 from a study of twenty cases in all stages of the disease. The amount of actual irreparable destruction of substance of the bowel wall produced by the submucous lesions peculiar to Crohn's disease was considered to be small and the severe stenosis and fistula formation of the later stage the result of secondary and non-specific deep ulceration. This deduction receives support from more recent observations published by Garlock and Crohn (1945). The diseased loop of bowel in twenty-five cases was 'by-passed' by performing ileo-colostomy. After leaving the excluded loop

under conditions of physiological rest for some months it was resected, and in all cases was found to show clear evidence of 'advanced healing and little or no inflammation.' This two-stage operation was followed by a 12 per cent. post-operative mortality and a 36 per cent. recurrence rate, and although it has added to our knowledge of the pathology of the disease this manoeuvre is quite unlikely to supplant wide resection of the affected bowel as the treatment of choice whenever this is possible.

There is no clear explanation for the unfortunate tendency of Crohn's disease to recur once it has reached the subacute or chronic stage. The recurrences are frequently found on the gastric side of the resected segment—an obvious indication for liberal resection of unaffected bowel proximal to the lesion. It also appears very probable that recurrence is related to incomplete removal of the affected regional mesenteric lymph nodes. It has been stressed by Hadfield (1939) that naked-eye examination of these glands at operation is likely to be fallacious; those which show gross enlargement sometimes contain no lesions whilst those of insignificant size often show a typical and active lympho-reticular reaction. Resection of the mesentery should, therefore, be planned as in malignant disease to remove the whole of the related lymphatic field disregarding the absence of palpable lymph nodes.

An extra-rectal inflammatory mass is a not uncommon sequel of advanced Crohn's disease when the primary lesion lies in the terminal ileum. The number of cases thus complicated and followed by peri-anal abscess and ulceration and by anal fistula is now considerable. Cases in which the disease attacks the colon are no longer rarities. In such cases the lesion is usually in continuity with a primary focus in the terminal ileum. In others it follows an ileal lesion as a recurrence,

A primary lesion in the colon is rare. Whatever its origin, the colonic lesion shows far less tendency to diffuse infiltration than when attacking the ileum, strongly tends to be localized, projecting and tumour-like and is less clinically outspoken so that secondary infection and ulceration have usually largely destroyed the typical submucous lymphoreticular hyperplasia some time before the specimen reaches the pathologist.

The search for the aetiological agent of Crohn's disease makes a sorry tale. More than one surgeon has made the challenging statement that M. tuberculosis has not yet been excluded as its cause. In this regard it is surprising how few cases have been thoroughly investigated by guinea-pig inoculation. In view of the apparently haphazard distribution of giant-cell systems in the regional lymph nodes this examination would necessitate the use of several, occasionally half-a-dozen, animals in the examination of each operation specimen. To investigate a significant number of specimens on this scale is a big undertaking but it should be carried out or vigorously encouraged by those who regard the uniformly negative evidence for tuberculosis as being too inconclusive for acceptance. One ingenious explanation which is difficult to disprove is that the initial event in the disease is an invasion of the intestine by M. tuberculosis followed by rapid and wholesale killing and disintegration of the bacilli *in situ*. The lipid material obtained by extraction of M. tuberculosis by fat solvents is unquestionably a powerful mesenchymal stimulant and the lesions which the tuberculolipids produce in the tissues of experimental animals contain giant-cell systems which show little tendency to caseate. It is just possible that an investigation recently carried out by Wells and Wylie may provide a clue to the aetiological basis of Crohn's disease. The serum of patients suffering from sarcoidosis in an active phase was found to be capable of modifying or completely neutralizing the ability of old tuberculin to evoke a typical reaction in the skin of persons known to be hypersensitive. The serum of a single case of Crohn's disease had a pronounced neutralizing effect.

Whilst the aetiology of Crohn's disease is still in the realms of speculation, our knowledge of its

clinical behaviour has been enriched by the published experience of many observers. In this issue we publish a detailed and fully documented survey of the literature of the disease by a surgeon, Mr. E. E. T. Taylor, and a critical review of the disease in all its clinical aspects by Professor T. L. Hardy.

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Annotation

'Compound E'

In October 1948 Philip Hensch delivered an oration to the Heberden Society entitled 'The Potential Reversibility of Rheumatoid Arthritis' in April of the present year he and his fellow workers at the Mayo Clinic have published a preliminary report² on the treatment of rheumatoid arthritis with 'Compound E', an adrenal hormone isolated by Kendall.

In his oration Hensch, drawing attention to the remissions of rheumatoid arthritis, described them as spontaneous, therapeutic, and accidental. Gold, first used on a false assumption, has the strongest claim to a place in the second group but induces a striking remission in only some ten to fifteen per cent. of cases, a figure which corresponds closely with that of spontaneous remissions. Because spontaneous remissions have happened to coincide with the trial of some new form of treatment, many therapeutic hopes have proved false; as a corrective to those assessing the value of any therapy in this condition, the results of simple supportive measures employed over a ten year period by Short and Bauer³ should be consulted. Certainly no form of treatment has hitherto produced rapid and convincing amelioration of the disease in a high proportion of cases treated.

Stressing the uncertainty of other measures,