Chronic Interstitial Enteritis

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I have pleasure in drawing your attention to this condition, which, I think, has not yet been fully described.

Twelve years ago I saw a professional colleague, suffering from obstruction of the bowels of a fortnight’s duration, previous to which he had had for several weeks numerous attacks of colic, slight attacks of diarrhoea with no tenderness over the abdomen, and very slight rise in temperature, with no appreciable alteration in the pulse-rate. When seen by me the abdomen was not distended nor were the muscles rigid, but to the hand gave a sense of putty-like resistance. As vomiting was persistent, I concluded that there might be an obstruction high up, and so opened the abdomen, to find the whole of the intestines, large and small alike, contracted, rigidly

fixed, so that when a loop was lifted from the abdomen it sprang back into its sulcus. That the wall of the whole intestine was chronically inflamed there was no doubt. In parts the peritoneum seemed oedematous, as was also the omentum and mesentery, in which the glands could be felt enlarged. Nothing could be done to restore the function of the canal, and the patient died a few days afterwards.

We were not then familiar with the condition, and it was supposed to be tuberculous, though this was negated by microscopic examination, the only information we obtained from the pathologist being that the condition was a chronic and inflammatory one. A few years

later, with Dr. Gibb of Paisley, I saw an exactly similar condition in a young man of 32. His symptoms were somewhat more acute than the previous case, but practically the same. He also died. No examination was allowed.

In these two fatal cases the disease involved the whole of the small and large intestines. The following cases being localized, and therefore excisable, permitted operation, and excision of the affected portion was in all cases followed by complete restoration to health.

The first of these cases I saw with the late Professor Gemmell in 1905.

Mrs. T. was admitted to the Western Infirmary with symptoms of partial obstruction, and one could palpate a coil of intestine, rigid and thickened. Treatment was of no avail, attacks of pain becoming more frequent; progressive emaciation and general malaise led to operative interference, when a portion of jejunum over 2 ft. in length was found to be affected and was excised, with perfect recovery. I removed in two cases the caput coli and adjoining portion of the ileum.

In another case the sigmoid, and in another the transverse colon, and, lastly, from a child of 10 a specimen which well now indicates the great thickening of the bowel wall. This specimen was from the middle of the ileum.

The following is the pathological report of the condition from the laboratory in the Western Infirmary, on the specimens obtained from the ileum, jejunum, and colon.

Pathology.

Histologically there is much in common in the three cases, indeed they form a graded series in which all the stages from acute to chronic may be traced. The most acute lesions are found in Master W. G., and the most chronic in Mrs. N. The following description is based upon a study of numerous sections from each case.

The earliest change in the bowel appears to be that of acute congestion. The vessels throughout are dilated, and there is much oedema of the submucosa. As evidences of the acute inflammation, the vessels are seen to be rich in polymorphs, and there is considerable infiltration of all the coats with similar cells. Here and there, too, in mucosa and submucosa irregular haemorrhages have occurred. These changes also implicate the mesentery in a lesser degree. It is noteworthy that the lymphoid aggregations are singularly free from pathological change.

With increasing infiltration the next phase arises, namely, cellular and fibrinous exudation within the gut lumen (bile-stained naked eye). Still later the mucous membrane is denuded of epithelium, and, the muscularis mucosae being obscured by infiltration and necrosis, the appearance is that of a few islets of glandular tissue lying in a semipurulent collection which abuts upon the much altered submucosa. There is, however, no great sloughing of the bowel wall, and the muscle is not laid bare, indeed it is in a way protected, as shown by a new formation of capillaries in the more superficial layers of the submucosa.

In the specimen from Mrs. T. the regenerative process is in the ascendency, although the condition is still fairly acute. The serous and muscular coats are slightly oedematous, markedly congested, even slightly haemorrhagic, and considerably infiltrated with both polymorphs and mononuclear cells. The submucosa is also oedematous and infiltrated, mononuclear cells, however, predominating. The muscularis mucosae is definable as the outer limit of a broad zone of young granulation tissue which is evidently replacing the now thin layer of purulent exudate within the gut lumen.

A still further advance in the healing process is seen in the sections from Mrs. N. There is scarcely any purulent exudate within the lumen, it and the mucosa having been replaced by granulation tissue in which the vessels are numerous and well formed, and fibroblastic transformation is well marked. There is less oedema of the tissues than in the two previous cases, and though lencocytic infiltration of all the coats is still great, it is definitely a mononuclear one. Further, there is a notable number of eosinophiles throughout, and a few giant cells are also present in the granulation tissue.

From the acute case, Master W. G., coliform bacilli were isolated in pure culture from the depths of the affected bowel wall under circumstances which suggest an etiological relationship. They are also demonstrable in suitably stained sections.

A careful search has failed to reveal micro-organisms of any kind in the depths of the other two cases—the ordinary bacterial flora of the gut alone visible in the most superficial part of the exudates. The symptoms in all the cases were similar; the characteristic and most striking feature being most violent colic, causing vomiting and occasionally an escape of some blood, also constant mucus from the bowel. The bowel becoming exhausted, or the contents being forced through the rigid portion, the patient then would be at rest, quite comfortable and cheerful for a time. In the case of the child even ten or twelve hours might elapse between the attacks of pain, which were truly distressing in their intensity. In the young one would naturally suspect intussusception, except that the obstruction was not complete, while the intensity of the pain put a chronic intussusception out of the question. Above the affected portion of the bowel peristalsis could be observed. During a painful attack the inability to retain food and the constant suffering leads to steady emaciation, the temperature only occasionally rises and during the intervals of pain, and the pulse is quiet. In all the cases one could determine an area of resistance in the colon.