

It is to be borne in mind that tubercular peritonitis terminates in spontaneous recovery in a considerable number of cases. In the peritoneum the tissues and the bacilli appear to meet on more or less equal terms, and the conditions of the struggle for supremacy are probably such that only a little assistance is required in order that the tissues may gain the upper hand; such a reinforcement of the tissues, or stimulation of their energies, may be regarded as being supplied by the changes which result from the making of an incision into the peritoneal cavity and the attendant manipulations of the affected tissues. There are clinical evidences in favor of this explanation of the phenomena. Among others, I may refer to a group of cases which have recently been made the subject of interesting papers by Harold Stiles and by Goldmann. I have had no fewer than three such cases under my own observation; they are met with in male children, and are characterized by the simultaneous occurrence of tubercular disease in the patent processus vaginalis and in the general peritoneum. It has been abundantly shown that excision of the tuberculous processus vaginalis with or without the testicle, or simply incision of the processus, is followed by cure of the peritoneal tuberculosis in a consecutive fashion which strongly suggests that the connection between the operation is one of cause and effect.

The operation upon the vaginal process in these cases may be regarded as analogous to the laparotomy in tubercular peritonitis, both being followed by improvement or cure of the tubercle diffused throughout the peritoneum.

A more remarkable example of the beneficial influence which results from exposure and handling of the diseased tissues in tubercular lesions within the abdomen is afforded by the following case, in which a tubercular tumor involving the cæcum completely disappeared after an exploratory operation. An unmarried woman, aged 36, was admitted to the University Clinical Wards of the Royal Infirmary in the beginning of August, 1894, with a history of four distinct attacks of illness attended with pain in the right iliac fossa, with vomiting, and with disturbance of the bowels. She was supposed to be suffering from recurrent appendicitis. Bimanual examination revealed a well-defined, firm, movable tumor in the right iliac fossa. Professor Annandale (whom I assisted at the operation) opened the abdomen in the right semilunar line. The tumor when exposed was found to be the cæcum, firm, solid and crumpled-looking, with the vermiform appendix fused to it posteriorly and inferiorly; the serosa of the adjacent coils of the ileum was studded with miliary tubercles, and there was very noticeable enlargement of the lymphatic glands in the corresponding portion of mesentery; one of these

glands was removed, and on laboratory examination was found to be tubercular. The tumor of the cæcum was not further interfered with, and the wound was closed. She returned to the country and was not seen again until May of this year (1895), nine months after the operation; her health was completely re-established. I again made a most careful bimanual examination, and could find no trace whatever of the tumor which had been felt with such ease before the operation.

The relation of the above case recalls the close analogy which it bears to the historic case of Spencer Wells, in which the abdomen was likewise opened on a mistaken diagnosis, and in which the cure of the disease afforded infinite surprise to the surgeon. Professor Annandale's case is, however, the more remarkable inasmuch as the disease inasmuch as the disease involved not only the peritoneum, but apparently all the coats of the affected segment of intestine, and it is a most important observation that the disease entirely disappeared as a result of its being exposed and handled. It is a matter for congratulation that the affected portion of bowel was not resected, according to the routine practice of some operators, or the case would have served no better function than to adorn or mar the statistics of intestinal surgery.

It will be remembered that cases have been recorded by Greig Smith, Crawford Renton, and others in which tumors, found to be irremovable on exploratory laparotomy, have afterwards disappeared and left no trace of their previous existence. As, however, in these cases no microscopical examination was possible, they are less instructive than they would otherwise have been.

Returning to the subject of peritoneal tuberculosis and its treatment by operation, reference may be made to certain experiments which have recently been carried out by Mannoti and Baciocchi with a view to determine the influence and the *modus operandi* of the operation. Having induced tubercular peritonitis in dogs and rabbits in the usual way, a certain number were "left to themselves"; with the exception of one dog, which showed signs of spontaneous recovery, all died of general tuberculosis within a period which varied from 7 to 9 weeks in the rabbits, and from 11 to 13 weeks in the dogs. The remaining animals were subjected to laparotomy; in the case of the rabbits, though death was not averted, the lethal termination was much delayed, there were evidences of decided although temporary improvement, and the tubercular process appeared to have its activity diminished. Among the dogs, on the other hand, seven completely recovered, improvement was very decided in two, while in two there was no change. In the case of the animals which recovered, the peritoneum on examination was found either to have regained its