

fossa, disclosed pus free in the abdominal cavity. No adhesions. The appendix was found perforated at the base, and was removed. Numerous small, hard tubercles were found on the pelvic walls, broad ligament and mesentery of the small intestine. The whole abdominal cavity was washed out with salt solution, a large amount of pus escaping from the pelvis and from the right hepatic region. Drainage of subhepatic space by gauze strip, and of pelvis by gauze and glass tube.

The pulse and temperature fell rapidly, reaching the normal line on the third day. There was no vomiting after the operation, and the patient is now, one week after the operation, considered out of danger.

The culture of the pus examined by Dr. R. M. Pierce showed numerous micro-organisms, the streptococcus and bacillus coli communis being prominent.

The case is of interest both on account of the virulence of the micro-organisms present, in particular the streptococcus, and on account of the supervention of an acute attack of appendicitis, with general infection of the peritoneal cavity, upon a previous, but not far advanced, tubercular peritonitis.

The operation of evisceration, sponging the bowels free of fibrin, thorough irrigation and sponging when necessary of the abdominal cavity, which must often be supplemented by incision of the intestines in order to allow escape of feces and flatus in order to permit their return, sounds like a formidable one, especially for patients weakened by a general peritonitis. Yet when we are confronted by the fact that without a thorough primary disinfection and drainage we cannot hope for recovery, it seems worth while to perform it even at the risk of shock. With moderate practice, the operation can be done in thirty minutes or a little more. The one step of the operation which is attended with most shock seems to be the attempts to remove adherent fibrin from the bowel. When the fibrin is firmly adherent it seems best, in the light of present experience, not to make too prolonged attempts to remove it. In one of these seven cases that died directly of shock within five hours of the operation the operation was I think unduly prolonged by attempts to sponge fibrin from the bowels. When it is only lightly adherent, it may be easily and quickly removed. Where there is purulent or sero-purulent fluid in the abdominal cavity, but no fibrin adherent to the intestines, it is not necessary to eviscerate.

The other fatal cases lived respectively, twenty, twenty-four and sixty hours, four days and eighteen hours.

In Case II, the girl who died four days after the operation, marked improvement immediately followed the operation. Death ensued upon paralysis of the bowel, and I shall always regret that a saturated solution of Epsom salts was not injected into the intestine.

This procedure, introduced by McCosh, of injection of saturated solution of Epsom salts into the bowel, was tried in four cases, and one recovered. The convalescence of this boy was most excellent, and seemed to me to be favorably influenced by the early movement of the bowels which ensued.

A brief consideration emphasizes the necessity of early recognition of the cases. Case I, which recovered, had general peritonitis for forty-eight hours after the first attack of pain. Three of the four cases which recovered presented in some respects the least advanced picture of the disease, the fourth was certainly

an advanced case. Several of the fatal cases showed most severe extensive and intractable processes four and five days after the first attack of pain. The fact that seven out of these ten cases occurred in children is of interest. It is possible that the early diagnosis of general peritonitis is made less often in children than in adults.

In these cases, and other operations for general peritonitis which have come under the writer's observation, those in which ecchymotic spots were noted on the intestine, the hemorrhagic cases, have been uniformly fatal. An occasional success in this otherwise uniformly fatal disease is sufficient indication for operation in all except absolutely moribund cases.

The complication of a fresh acute general peritonitis, in which the streptococcus was found, with an old tubercular peritonitis in Case X is of interest.

### A CASE OF GENERAL PERITONITIS; OPERATION, RECOVERY.

BY WILLIAM T. SMITH, M.D., HANOVER, N. H.

CASES of recovery after operation for perforating appendicitis when general peritonitis has already set in are well attested. But they are rare. My own experience with such cases has been so discouraging that when the symptoms of general peritonitis are distinct I have come to expect a fatal result, though I always advise operation to give the patient what chance there may be. I have had recently such a case in a farmhouse in which the patient recovered and I wish to record it.

A farmer, forty-five years of age, in good health and with no history of previous attacks was taken with appendicitis on Wednesday afternoon. After a night of severe pain he sent for the doctor Thursday morning. The usual symptoms existed, pain, at first diffused, later locating itself at McBurney's point; temperature 99° to 100°; pulse 80 to 90 and obstinate constipation. No vomiting. No tympanites on Thursday. Thursday night pain was intense. Friday morning when I was called it had ceased. The belly was tense and tympanitic up to the ensiform cartilage. Temperature 101°. Pulse 134 to 144. Countenance drawn and anxious. I advised immediate operation but gave no encouragement to the friends. On opening the abdomen a sero-purulent fluid oozed out. I found the appendix curled up and adherent at the margin of the pelvis. The adhesions were recent and I separated them freely as there was no indication of any walling in of the locality, and removed a swollen and angry appendix; its lumen obstructed near the base by concretions and an ugly gangrenous perforation beyond. Puncturing the colon in two places to let out the gas, I drew out several feet of small intestine which was inflamed and had many patches of membranous exudate on it. With a one-half of one-per-cent solution of formalin I washed the gut and rubbed off the patches of exudate with a sponge. The gut was then returned, the puncture in the colon being closed by fine silk through the serous coat. Lacking a proper irrigator the blind end of an eight-inch test-tube was broken off and the other end inserted in the abdomen and through this tube irrigation was done with a one-half of one-per-cent solution of formalin. An iodoform gauze wick was carried down to the stump of appendix. A single stitch of silkworm-gut through the whole thickness of

the abdominal wall drew together the upper portion of the three-inch wound.

By the third day after operation the temperature was nearly normal; the pulse 80 to 90; the bowels had moved freely. The patient recovered.

## Reports of Societies.

### THE AMERICAN LARYNGOLOGICAL ASSOCIATION.

THE TWENTIETH ANNUAL CONGRESS HELD IN BROOKLYN, N. Y., IN THE HALL OF THE LONG ISLAND HISTORICAL SOCIETY.

FIRST DAY, MAY 16, 1898.

THE President, DR. THOMAS FRENCH, of Brooklyn, made the opening address, welcoming the members in the name of Brooklyn and of the medical profession, and congratulating them on the fact that, with the advance of years, there had been an advance in knowledge. The Association had never been more successful and active than at the present time.

As the result of the work of Pasteur, Lister and Koch a new pathology has been created. The foundation of medical education is, to-day, normal histology and pathology. The search-light of biology and bacteriology is only beginning to reveal the fields for study, which, doubtless, contain many truths which the future will disclose. Our dependence on the microscope in diagnosing disease is growing with each year, but a proper conservatism in regard to its findings must be observed, for the useless loss of important structures from the not infrequent simulation of elements of inflammation tissue for those of conditions requiring thorough eradication.

As Dr. Delavan has given the history of the Association I will confine myself to specialism and the progress of laryngology and rhinology during the past twenty years.

Three classes of workers are needed in scientific work; the first is the original investigator, who seeks for truth for its own sake; the second the teacher who diffuses the knowledge acquired by the original investigator; the third is he who applies knowledge to its practical uses. Tyndall, in an address delivered in New York twenty-five years ago, said that in no other country would science in its highest forms exert a more benign influence than in ours. At that time those who confined themselves to work in one line were few; now their number is legion and the tendency towards a special field for practice is growing stronger each year. In no department of medicine have the workers increased so rapidly as in ours. Years of practice, together with natural aptitude, are absolutely necessary in order to acquire skill in the surgical treatment of diseases of the larynx, but much less practice is required to permit of intranasal surgical work, and this fact is unquestionably accountable for the large amount of indifferent or mischievous surgery which is yearly growing more noticeable. The advice of Sir Morell Mackenzie that a man should practise medicine and surgery during the first ten years of his career is of greater value to-day than ever before. It is wise to remind a student of the advice

given by Dr. William Osler: "As a man values his future life, let him not get early entangled in specialism." To a certain extent it is true that many workers in various departments of medicine are becoming too narrow in their studies, devoting themselves to the acquisition of a limited field at the expense of general medical and surgical information. The charge is also made that specialism is doing great harm because of the charlatans who live and thrive under its influence, yet it is a fact that there are fewer of them to-day than ever before; this condition is due not to specialism, but to the weakness and selfishness of mankind.

Despite the evils that are growing out of specialism the fact that men are centring their thoughts on special lines of work more than ever will result in the largest amount of good to mankind, for we are beginning to realize that concentration is the price we must pay for efficiency. It behooves us to think well on these things and to secure to specialism the minimum of harm and the maximum of good.

Without the discovery of cocaine by Köller the vast strides made in the treatment of diseases of the nasal passages and of the naso-pharynx would not have been possible. Antitoxin, serum-therapy and organo-therapy have played their part in aiding in the advance in this line of work. To a large extent Dr. Dwyer has driven tracheotomy from the field, and to Dr. Hooper must be given the credit of having awakened interest in lymphoid growths of the pharyngeal wall. While the methods of treatment of laryngeal tuberculosis give better results than formerly, we cannot look for signal success in dealing with this disease until the nature of tuberculosis is better understood.

The noteworthy work of our Corresponding Fellow, Sir Felix Semon, and of Prof. B. Frænkel brings encouragement. Dr. Semon in 1894 reported 58 instances of cures of selected cases in private practice after removing diseased parts through an opening made by cutting the thyroid glands.

Our Corresponding Fellow, Dr. John Mackintyre, has succeeded in obtaining, by the use of the x-ray, an image of the septum, the roots of the teeth and other hard structures in the neighborhood. He has also demonstrated the process of ossification in the thyroid cartilage. The shadows of the larynx, however, are not as sharply defined as the photographs of hard bone or foreign bodies. What Lister has done for us by antiseptics, both local and general, has banished the fear of the knife.

As we are ever striving for the truth, and have only one fear—to believe an untruth—free and friendly discussion is invited as the discipline entailed by the practice suspending judgment is one of the means of converting the actual into the ideal. If epitomes of papers to be read could be sent to members of the Association two weeks before the meeting discussion would be of a more fruitful character. The Association wants young, vigorous spirit and particularly men who are interested in and in touch with the advance knowledge of biology, bacteriology and physiology.

At the nineteen meetings of the Association 56 per cent. of the total membership have been present. Since Dr. Elsberg presided, 411 papers have been preserved in the archives of the Association.

DR. J. N. MACKENZIE, of Baltimore, next read a paper on the