

TRANSACTIONS OF THE NEW YORK SURGICAL SOCIETY.

Stated Meeting, February 14, 1894.

JOHN A. WYETH, M.D., in the Chair.

RESECTION OF THE RECTUM FOR CANCER, AFTER OSTEOPLASTIC RESECTION OF SACRO-COCCYX.

DR. WILLY MEYER presented a patient from whom he had removed a constricting carcinoma of the rectum after osteoplastic resection of the sacro-coccyx. The patient was a woman, fifty-one years of age, who had entered the German Hospital the beginning of April, 1893. She had complained for about three months of progressive symptoms of stricture of the rectum. She said she had lost blood per rectum at times and was considerably emaciated. It was not until she had been narcotized that he was able to barely reach with the tip of his finger a distinct new growth, in the centre of which there seemed to be a small passage to the gut beyond. A point of interest was the fact that a number of large, hard, movable nodules could be felt in the left, and also in the right hypogastric region, by bimanual palpation. At that time he could hardly believe these were secondary growths. Large scybala were thought of. On April 2, he performed ordinary inguinal colotomy and then found, while the abdomen was open, that the large masses were faecal concretions in the sigmoid flexure. The lower end of the descending colon was stitched to the abdominal parietes. While the patient was still under narcosis he was able to pass a catheter, of about No. 20, French gauge, through the stricture. The gut was not opened until two days later, by a longitudinal, not by a transverse, incision. The next three weeks frequent oil and water irrigation through the permanent catheter brought away much hard faecal matter out of the opening in the left groin. Although Dr. Meyer was not sure the sigmoid curvature was quite free of all concretions, yet he did not wish to wait longer, and

proceeded to remove the growth, April 25, by the modification of Kraske's method, originally proposed by Rehn, of Frankfort-on-the-Main, in 1890, three years later once more by Rydygier. A longitudinal incision is made through the soft parts down upon the border, generally the left, of the sacrum from the posterior inferior spine to about midway between the tip of the coccyx and the anus. A transverse one is then added across the sacrum, where it is intended to divide that bone. In his former Kraske operations he had often had, as he believed was the case with other surgeons, quite some hæmorrhage after dividing the bone. To avoid this he tried, after the transverse incision with the knife had been made, loosening the soft parts over the lower aspect of the sacrum bluntly with the fingers. This succeeded well. Then on dividing the bone transversely with the chisel he had no hæmorrhage whatever. The skin-muscle bone-flap was then turned back, giving easy and perfect access to the tissues beneath. Now the rectum was shelled out, a number of enlarged lymphatic glands removed and the peritoneum opened. The mesocolon was ligated between two ligatures and the sigmoid curvature pulled down. After shutting off the peritoneal cavity, by stitching the peritoneum to the gut and draining on either side with a strip of iodoform gauze, he divided the gut above and below the stricture, thus removing the growth. To his dismay he found a large fecal concretion still in the gut above, in spite of the three weeks' preparation. It was removed piecemeal. A second one was seen, but could not be reached. Nothing could be done but stitch up the gut by circular enterorrhaphy (inner row of catgut, an outer row of silk). The external wound was packed with gauze and the reflected skin-muscle bone-flap returned. The patient made a good recovery. On the third day she passed one of the large scybala, in spite of large doses of opium, through the wound, rupturing the line of sutures in the gut posteriorly. In the course of the next month a sacral anus established itself, through which defecation was going on. The inguinal opening closed to the size of a pin's head. Five months later the patient came again under Dr. Meyer's care. He then first reopened the gut in the inguinal region, and a few days later, after proper preparation of the gut, reincised the original wound, loosened the wall of the rectum from the surrounding tissue at the site of the sacral anus and closed the latter transversely by a double row of silk sutures. Primary union was obtained. Later Dr. Kammerer closed the colotomy wound. The patient had acquired perfect control of feces and gas, and had

considerably gained in flesh. She had open bowels every day through the anus without trouble and had shown no evidence of return of the disease.

Dr. F. KAMMERER said that he had used such an osteoplastic resection of the sacrum six times and could testify to its efficiency. Three of the operations were for cancer, two for fistula, one for papiloid growth. In his opinion the method was an excellent one. The incisions could be made in very little time, and the hæmorrhage was very slight. There had been no exfoliation of the reflected bone in his cases. One of his patients, a man seventy years of age, who had extensive cancer of the rectum, died on the second day.

APPENDICITIS COMPLICATED WITH INTESTINAL OBSTRUCTION.

Dr. ROBERT ABBE presented a boy who had been seized with a severe attack of appendicitis on December 16, 1893. When seen by Dr. Abbe, on the fourth day, he was in a very grave condition. The usual operation for appendicitis relieved the abdomen of a perforated appendix with abscess. For one week all went well. But by the twelfth day, after three days of fæcal vomiting, Dr. Abbe diagnosticated intestinal obstruction, and opened the belly in the median line, and found a coil of the small intestine distended, kinked, and held by an adhesion at the site of the appendix. It was with a good deal of difficulty freed from its ancient adhesions. He then incised the gut and let out a pint of fluid fæces which had collected above the obstruction, and immediately sutured the cut. The boy made an uninterrupted recovery thereafter. The point of interest in the case, he said, was the unusual cause of the obstruction,—namely, a point of adhesion at the site of the appendix, and the perfect relief afforded by laparotomy after fæcal vomiting had continued four days, also the slashing of the intestine. He dwelt upon the desirability of letting out of the gut the stagnant fæces through an incision of the bowel, instead of allowing them to rush into the released distal portion of the bowel where the ptomaines and other poisonous elements might be absorbed and add greatly to the dangers of the case. The suturing of the wound in the gut took but little time, was efficient, and the gut was immediately dropped back.

Dr. BRIDGON referred to a case in which a boy, operated upon in the Hospital for Appendicitis, was up and about the ward about the second week when he was seized with pronounced symptoms of

intestinal obstruction. It seemed some adhesion must have taken place, causing strangulation of the gut. He was put under the influence of chloroform, was inverted, a tube was introduced into the rectum, and as much water was introduced as would enter. At the same time massage of the abdomen was made and continued for a while after the recumbent posture had been resumed. Within an hour the patient had a copious defecation.

Dr. WYETH had operated on a case for acute appendicitis, and the same week symptoms of obstruction developing, he made an artificial anus, a large amount of fecal matter and flatus discharged, and within six hours the relief from distention was complete.

Dr. F. H. MARKOE said he had operated upon a girl some days after a single attack of appendicitis. The symptoms present when Dr. Markoe operated were those of obstruction with fecaloid vomiting which had lasted two days. The appendix was found lying directly across from the cæcum towards the left side, its extreme end had been perforated, and to that a loop of the ileum was bound which gave it a sharp turn directly backward, interfering with the passage of the intestinal contents. He severed the small but very firm old adhesion immediately. The loop of intestine filled again and the continuity of the lumen was restored. As a result, however, the existing peritonitis became worse and the patient died.

CHOLECYSTOTOMY.

Dr. JOHN A. WYETH presented a patient, a merchant, forty-nine years of age, who had been in perfect health until three years ago, when he began to suffer from repeated attacks of gall-stone colic. On January 23, Dr. Wyeth made an incision parallel with the rib over the gall-bladder. The viscus contained 159 gall-stones, one of which was one inch in diameter. It was immediately sutured; there was no reaction, the patient had remained well since the operation.

A second case was related and a specimen presented. The woman, fifty-two years of age, had entered the Mt. Sinai Hospital with a history of recurrent gall-stone obstruction, and was intensely jaundiced at the time. Although she was in very bad condition, he operated, but upon reaching the usual location of the gall-bladder did not find it. After some search it was discovered, small, thin-walled, flattened upon itself, completely collapsed. No gall-stone was found. The wound was closed. The woman died three days later, and at autopsy a little stone, three-eighths of an inch in diam-

eter, was found in the peritoneal cavity near the cæcum. There was complete obstruction in the hepatic duct at the site where this gall-stone had suppurated through, the obstruction having given rise to jaundice by preventing passage of the bile. Dr. Wyeth added that he made the transverse incision because it gave more room.

CLUB-FOOT DUE TO EXOSTOSIS OF FIBULA.

DR. VIRGIL P. GIBNEY presented a boy on whom he had corrected by operation club-foot due to an unusual cause, exostosis following fracture of the lower epiphysis of the fibula. The boy was about fifteen years of age, had sustained the fracture when two or three years old, received little treatment, union took place, but with considerable exostosis, and as he grew the foot turned in and finally presented marked club-foot. Dr. Gibney first thought it would only be necessary to chisel off the external mass of bone, but before he got through with the operation it became necessary to go to the extent of removing external malleolus and the head of the astragalus. In spite of the fact that the synovial fluid had escaped from the ankle-joint, the boy recovered from the operation without any temperature, and was hobbling about, wearing the plaster-of-Paris bandage, within three or four days. There was very good function in the foot at present and no deformity.

SURGICAL THOUGHTS ON APPENDICITIS.

DR. J. D. RUSHMORE read a paper on this subject, which appears in full on page 576.

Dr. ABBE thought surgeons could not be too persistent in urging upon medical men the necessity for looking upon appendicitis as a surgical disease, or one in which the surgeon should be called in consultation at the earliest possible moment. He had seen two cases that week in which he was able to save life only because the physicians had sent for him early, they having been impressed with the importance of doing so by the teaching of Dr. McBurney and others. In the second case he operated about twenty-four hours after the initial pain, yet purulent lymph had already begun to form and would have soon led to gangrene of the appendix. It was the man's first attack.

Dr. GERSTER spoke upon a question which he regarded as being of much practical importance,—namely, whether after evacuating an

abscess which was the primary indication for the operation, we were justified in going on to hunt for the appendix and remove it. This question had been forced upon him in a most disagreeable way recently; for the patient, immediately on coming from under anesthesia, asked whether his appendix had been removed. Dr. Gerster thought Dr. McBurney had stated the case fairly at one of the first discussions upon the subject of appendicitis, to the effect that if the appendicitis were in the first stage, and there were no abscess, or only a small one, and the appendix could be readily got at, it was the surgeon's primary duty to remove it. But if the abscess were filled with decomposed, fetid material, and was surrounded by strong adhesions, shutting it off from the rest of the cavity, it would be bad surgery to make much search for the appendix, and in doing so risk infecting the entire peritoneal cavity. There were, however, cases on the border-line between these two classes, and there the individual disposition of the surgeon would probably decide whether he would or would not search for and remove the appendix. One, in his eagerness to do away with possible recurrence, would go further and remove the appendix, while another, fearing possible infection by his interference, would content himself with evacuating the abscess. Dr. Gerster regretted to have to record a case of death recently due, he thought, to his too great eagerness to remove the appendix. The abscess was not very large, and he thought he could reach the appendix easily, so he shut off the peritoneal cavity carefully, evacuated the abscess, dried out the inside wall, and scraped away loose material, in short, disinfected the cavity and the immediate vicinity as well as it could be done, but, unfortunately, there was another abscess behind the appendix which was opened accidentally in the search for the appendix, and flooded the entire field as far as the artificial dam. Nevertheless, infection must have taken place in the posterior portion of the abdominal cavity, for the patient developed acute septic peritonitis and died. It could not have been worse had he contented himself with draining the first abscess, left the appendix, and also taken his chances with regard to a second operation for the removal of the appendix.

Dr. McBurney thought that if we talked too earnestly of the necessity of calling a surgeon early it might have the opposite effect with the general practitioner, by giving him the impression that the presence of the surgeon always meant operation. We ought to try to allay this fear, as it certainly was in the interest of the patient and

surgeon to do so. He would suggest as one way of inducing the medical practitioner, pure and simple, to call a surgeon early, to ask the question whether he had any remedy of any kind whatever which he could recommend in any stage of the disease, and he would be obliged to answer that he had not. He thought this a fair question to put, and that if it were answered conscientiously, it would compel physicians to call the surgeon as soon as possible. Further, one might ask the physician whether this was a preventable disease; whether there was any means for preventing an attack of appendicitis. The answer to that question also tended to throw appendicitis largely out of purely medical hands. But it should at the same time be made clear that while surgery was the only remedy, yet, as in many other diseases, it was not always called for.

The subject had to be discussed with some caution before medical men, because the feeling was so strong that the presence of the surgeon meant an operation, and doctors were so much less inclined to let go their hold on cases of this disease than on others which were not any more surgical. They would not think, for instance, of retaining charge of a case which they had become convinced was one of intestinal obstruction, yet for some unaccountable reason they would hold to a case of appendicitis until, perhaps, a large abscess had formed. He had seen cases which had been under the care of a physician more than a month before he thought of calling a surgeon.

He agreed with Dr. Gerster as to the necessity for great caution in searching for the appendix in a cavity the walls of which were thick and septic, and removing a portion of that wall, for that was what removal of the appendix under those conditions amounted to. Of course, if the appendix were hanging free in the cavity one would not hesitate a moment to take it away. But where it had become a portion of the septic walls of the abscess cavity, sound surgery certainly required great caution about breaking up the walls for its removal. While he thought there was much danger to such a procedure, and preferred for that reason not to interfere with the appendix in such cases, yet he realized the liability to recurrence where the appendix, when not destroyed by disease, was left in the abdomen. He cited several cases in illustration of this point, appendical abscess having recurred after healing of the first by operation.

Stated Meeting, February 28, 1894.

The President, ROBERT ABBE, M.D., in the Chair.

EXCISION OF GANGRENOUS APPENDIX FOLLOWED BY
INTESTINAL OBSTRUCTION.

DR. ARPAD G. GERSTER presented a girl, aged nine years, whom he had subjected to operation for relief of gangrenous appendicitis, October 14 last.

On incision a large, somewhat turbid, odorless serous effusion, unencapsulated, was found around the colon, which, together with adjoining coils of small gut, was much injected, but not adherent. The root of the appendix was exposed, and it was found that the organ was reflected down into the small pelvis towards Douglas's pouch, where it lost itself in a hard mass. On further separation of some recent adhesions a cavity was opened, from which about two ounces of fetid pus were cautiously removed by sponging. Then the appendix, located in this cavity, was turned out. It was found nearly four inches long, was gangrenous and perforated near its apex, non-adherent, and containing some fecal concretions. Dissection of its mesentery was rather difficult on account of its density and shortness. For fear of injuring the colon, a ligature was not applied to one bleeding point, but an artery clamp was left *in situ*. The wound was drained and packed.

An immediate improvement of all symptoms followed. October 16 the dressings were changed in anæsthesia. Deep packings renewed after removal of clamps. October 19 rather profuse arterial hæmorrhage, apparently from artery which had not been tied, but it had stopped spontaneously by the time Dr. Gerster reached the patient, so nothing further was done.

October 22 it was noted that fever had set in, caused by retention in Douglas's pouch, from which fetid pus welled up through the wound on pressure from the rectum by the finger. A long drainage-tube was slipped into the bottom of this cavity, and immediately improvement followed.

About this time, after meals, severe colicky pains appeared, for which a dose of calomel was given, under the supposition that the colic was caused by retained solid feces. The colic disappeared for a few days, but set in again with increasing severity towards the end of the month, and became much aggravated by constipation and

continuous non-febrile vomiting, which finally became distinctly faecal on November 2. Characteristic distention of certain coils of gut was observed. These coils became very well defined during a spasm of colicky pain, when their squirming could be plainly seen through the abdominal walls. An internal obstruction was diagnosed, and, as the child was apparently failing, laparotomy was decided on.

November 3, laparotomy. Fortunately the discharge from the appendicular abscess had become scanty and bland by this time. Nevertheless, the old sinus was first carefully scraped, wiped out, and packed with iodoform gauze. The old incision was then extended upward about three inches, well beyond the new adhesions to avoid injury to adherent gut.

On exposure, a much distended portion of congested small intestine came in view, behind which lay another flat, band-like, pale, and empty coil, the latter closely attached by recent adhesions to other similar coils and the parietal peritoneum of the small pelvis. These adhesions were all broken up. In fact, the small pelvis was emptied of its intestinal contents, and thus it was found that the collapsed intestine consisted of the ileum adjoining the caecum, about three feet in length, its upper proximal portion crossing the median line to the left side diagonally at the navel. Finally, the place of constriction was found in the left hypochondrium. A band of inflammatory material was seen passing from the mesentery of this part of the ileum around the gut and to the other side of the mesentery, surrounding the intestine as a ligature would. On one side of this band lay the much-distended, on the other, the collapsed gut. After division of the band, intestinal contents were seen at once to enter the collapsed portion.

The wound was closed after irrigation of the abdominal cavity. The patient bore the operation excellently, and made an uninterrupted recovery. On November 4 there was a slight rise of temperature, but no distention, vomiting, or unfavorable change in the rate and quality of the pulse. November 5, the bowels were moved by a series of small doses of calomel. November 14 the patient was discharged cured.

Dr. McBURNEY suggested as to the origin of the obstructing band the following explanation: The inflammatory mass was broken up in the right iliac fossa. There were, of course, a large number of coils there. The adhesions were not limiting, and he supposed some

fibrin existed on the coils. Probably the coil which afterwards became adherent on the left side was one which had lain in the right iliac fossa, and when it became displaced or replaced, the adhesion band constricted it in its new position.

The inflammatory conditions favorable for the formation of bands were often present, and the wonder was that they did not occur more frequently. One often saw a coil of intestine with a mass of lymph about it and all the conditions pointing to the probable formation of a band, but the subsequent history did not point to constriction of any kind. The adhesions disappeared in some way. In this particular case a band remained and became organized. Probably all had observed at second laparotomies entire absence of adhesions where at the first operation lymph was observed in abundance.

Dr. GERSTER said that in this particular case sufficient time had not elapsed since the first operation for the fresh adhesions to have disappeared, yet the vast fresh adhesions in the small pelvis where he might have expected obstruction had caused no obstruction whatever, and it was not until he had broken up the adhesions of about three feet of intestine in this neighborhood that he discovered the real cause of the obstruction above. Dr. Gerster accepted Dr. McBurney's explanation of the manner in which the obstructing band had formed as probably the correct one.

VARICOSE ANEURISM OF THE HAND.

Dr. JOHN A. WYETH presented a boy, two years and eight months old, with a dilated condition of the vessels, beginning with the subclavian artery of the right side, involving the axillary, brachial, radial, and ulnar arteries, and evidently anastomosing with the veins at the hand and wrist, forming varicose aneurism with a distinct bruit. The boy's home was at a high altitude in Nevada, and during his stay at the sea level there had been considerable diminution in the size of the hand. At Dr. Wyeth's request several surgeons of the city had seen the patient, and they were not yet decided whether the innominate was involved, but it was Dr. Wyeth's opinion that it was not. The carotid on that side did not pulsate more than that of the left. The affected hand felt much warmer than the other. As to treatment, it had been concluded not to operate upon this patient at present. Should unusual activity in the varicose vessels supervene at any period, operative measures, such as partial amputation or deligation of vessels, or occlusion by Roser's method, would be indicated.

Dr. ABBE referred, in connection with Dr. Wyeth's case, to one, which he had shown about ten weeks before, of aneurismal varix of the hand of considerable extent. The boy had been under treatment ever since. The radial artery had been ligated, and the tumor had been traversed in various directions by over a hundred silk threads dipped in a styptic solution and left in for two weeks. The result had been marked reduction in size, and numerous cord-like masses could be felt where the threads had penetrated the tissues.

Dr. GERSTER had seen good results in the treatment of such cases by various methods, and he thought we should not limit ourselves to any single one where a combination might do better. Deligation of the chief afferent vessel seemed to him one of the conditions of success. Then the diffuse part of the malady could be treated by excision of wedge-shaped portions, and the parts united by deep sutures. The method suggested by Dr. Abbe could also be applied in the superficial or cutaneous portions, although he did not believe they alone would bring about lasting improvement in deeply-affected parts. Percutaneous ligatures could also be employed. He had had the pleasure last year of seeing Dr. Mynter, of Buffalo, demonstrate brilliant results gained by percutaneous ligature, ten or fifteen being used with the result of nearly curing the case. Aseptic surgery, which did not attempt too much, would accomplish a great deal in these cases.

BRAIN TUMOR ; DOUBLE TREPHINING FOR RELIEF OF PRESSURE.

Dr. KAMMERER presented an adult woman with the following history :

She has never been ill ; admits, however, the possibility of venereal infection, although she has had no symptoms of syphilis ; has had no children. Her present illness began about a year ago with violent headaches on the right side, and vomiting. Fourteen days later, on awakening one morning, she experienced an unusual sensation on the right side of the head, and on closing the left eye, she for the first time became aware that she could not see with right eye ; gradually hemi-anæsthesia, and then about five months later a hemiparesis of the whole right side of the body developed. The diagnosis of specific lesion was made, and the patient was put on large doses of iodide of potassium—300 to 400 grains a day—for a long time, with no marked result. The attacks of headache and vomiting became

more severe every time they came on, and during the last three weeks before the first operation the patient vomited everything that she took.

She also complained of excruciating pain on the right side of the head, over the entire frontal lobe, whereas the left side was entirely free from pain. All external applications for relief—also mercury and iodide internally—having again proved useless, it was decided to operate to relieve intracranial pressure. The following was the condition of the patient before first operation :

Complete hemi-anæsthesia on right side.

Hemiparesis on the same side.

Right optic atrophy.

Partial paralysis of the right oculomotorius,—raising and lowering of eye impossible.

Complete paralysis of right olfactory.

Complete paralysis of right abducent.

Sense of taste is destroyed on anterior and posterior right half of tongue.

Sense of touch, temperature, and pain are much reduced on right side.

Right bulbus oculi protrudes slightly, and the iris on this side does not react to light, but does contract synchronously with the left iris.

Slight increase of tendon reflexes on right side.

The diagnosis was made of a tumor of the brain.

It was assumed that at least two foci were present, one in the left hemisphere, and the other on the right side at the base of the brain. Any radical operative measure being out of question, he trephined by the omega incision for the relief of pressure over the right parietal region, and removed a piece of bone three and a quarter inches long and two and a half inches wide, with Hartley's chisels, described by him for the operation of intracranial neurectomy. Leaving the bone in connection with the flap, he fractured its base with the intention of simply raising it at its upper margin, and thus increasing the capacity of the cranium, a method previously employed by Dr. McBurney. He found some difficulty in retaining it in this position, and feeling that great freedom would be afforded the brain if the bone was entirely removed, did so. There was primary union. After the operation—June, 1893—the pain on right side entirely disappeared, and there was no vomiting for several weeks, then occa-

sional vomiting set in. There was, moreover, a distinct improvement as regards paresis on right side, the patient being able to walk much better, and having more power in right arm and leg. There was also some sensation on pushing a pin into the deep tissues. The patient began to complain of pain on the left side, vomiting was more frequent towards September. Imagining, from the bulging out of the brain on the right side, that the former was perhaps due to mechanical causes set up by the first operation, he decided to do the same operation on the left side, and again removed a piece of bone in like fashion, measuring two and a half by two and a half inches. The effects of this operation, although also very apparent, were not as marked as the first time, but even now, nine months after the first operation, her condition is much better than before that time. Lately she has more pain on right side again, but rather at the back of the right eye. The latter protrudes very much now, being evidently pushed forward by the neoplasm, which, of whatever nature, has invaded the orbital space. At the time of the operation the dura was not incised, and in this way a prolapse of the brain avoided, as the large openings in the bone were deemed sufficient for, at least, some reduction of pressure. A few months ago, although the patient was fairly comfortable, he again anesthetized her, and punctured both ventricles, believing that some fluid might be present. On the right side he withdrew several drachms of clear yellow fluid; on the left side, though several punctures were made, only blood. No change in the patient's condition resulted from this.

There is now considerable bulging of the brain on both sides, although the dura was not incised; and the object of the operation has been realized, perhaps not to so great an extent as if the brain had been allowed to protrude from the cranial cavity.

Dr. WERTH remarked that he had trephined in two cases with symptoms of brain tumor, and finding no tumor had sewed up the dura, but had not replaced the bone, improvement had followed relief of pressure, as it had in Dr. Kammerer's case. One of the patients had been comatose about two weeks. He had not made a will, but after removal of the piece of bone consciousness returned, the man was able to attend to his business for seven months, wrote a will which afterwards stood, and finally, at his death, the tumor of the brain was discovered to have been beyond the reach of the surgeon's knife. The other patient also became conscious after the exploratory operation.

REMOVAL OF EXTENSIVE OSTEO-SARCOMA OF UPPER JAW; NON-RECURRENCE.

DR. CHARLES MCBURNEY, in connection with the case shown Nov. 22, 1893 (see page 241), presented a young man to further illustrate the possibilities of non-recurrence after removal of extensive osteo-sarcoma of the upper jaw. The patient was operated upon a little over four years ago for sarcoma of the superior maxilla of nine months' duration. When he came under the reporter's notice the cheek was very prominent, the eye was bulging, the malar bone was somewhat elevated. The operation was the usual one for complete resection of the left upper jaw, the floor of the orbit and malar bone being also taken away. The healing was rapid. The patient has a plate to fill in the cavity, but, unlike most patients, finds it somewhat uncomfortable, and prefers to put in gauze, which he changes frequently. Dr. Hodenpyl, after microscopic examination, reported the tumor to be a small spindle-celled sarcoma. There is as yet no evidence of recurrence to be found. In reply to a question, he stated further that in his opinion the wearing of an artificial plate for filling in the defect in the roof of the mouth was to be preferred to any plastic operation.

Dr. GERSTER agreed with Dr. McBurney, for while the defect could be closed easily by a plastic operation, yet it would obscure any point of recurrence should this take place, and prevent early removal or other method of treatment.

Dr. MCBURNEY rejoined that in one instance he had operated fourteen or fifteen times for recurrence in the back part of the pharynx, usually with the cautery, through the aperture left after the first operation for removal of the upper jaw. Had the cavity been filled by a plastic operation the seat of recurrence would have been concealed from view.

Dr. ARBE also thought the advantages of leaving the cavity open very great, and he had done so in a recent case of fibro-sarcoma of the posterior pharyngeal wall, in which he had resected the upper jaw. He thought, however, that where there had been no relapse for four years it might be permissible to close the cavity by a plastic operation.

SPLENECTOMY.

DR. F. KAMMERER presented a spleen from a man of forty-five, who had been treated for malaria for the past three years, during which time a large tumor of the spleen had developed. Patient has taken

arsenic, iron, and strychnine in large amounts. During the past half a year he had been unable to do anything, suffering pain, and especially inconvenience from the rapidly-increasing size of his tumor, which reached on admission to the hospital beyond the median line to the right and down on the left side to the brim of the pelvis. It seemed fairly movable, and on standing it distinctly changed its position, sinking down somewhat towards the pelvis.

The ratio of white to red blood-corpuscles in many examinations showed such differences that the number are of no value. The number of red corpuscles was normal. There were no glandular enlargements. The post-mortem examination gave distinct evidence of the existence of leukæmia of the splenetic variety. The general conditions being good, after refusing to operate at first, he was finally persuaded by the urgent request of the patient to undertake extirpation of the spleen. An incision was made transversely, reaching from the lumbar region on the left to the outer border of the right rectus muscle, separating all the parts, including the peritoneum. A small incision was then carried, about three or four inches long, from the first in a downward direction along the outer border of the left rectus. Thus the lower border of the tumor was well exposed. Some of the omentum lying over it was ligated and severed. Then the lower border was raised and an attempt was made to reach the pedicle, separating the adhesions of the omentum as he worked on. The hæmorrhage from the original incision, and at this stage, was rather free, but was easily controlled; but this was otherwise when the large veins entering the spleen were reached. These were exceedingly brittle. He tore a small opening into one of them, although proceeding with the utmost care, and in trying to apply an artery forceps to it the entire vessel gave way, necessitating compression to prevent serious hæmorrhage during the greater part of the operation. Finally, he was able to ligate the vessels at this point by passing an aneurism-needle behind them, fortunately without injuring them, and to divide them between two sutures. He now began to separate the adhesions to the diaphragm. These were very firm and necessitated the application of much force, but he finally succeeded in developing the tumor from under the ribs and holding it over. It was attached to the stomach, pancreas, and colon. There was considerable, but not alarming, hæmorrhage from the adhesions to the diaphragm, which were immediately controlled by a tampon of sterilized gauze. It was now seen that only half the pedicle had been ligated, and that another

strand of vessels entered the spleen at a higher point than that which they had been able to reach from below. They were ligated and the spleen removed. The patient was in a fair condition considering the heavy loss of blood. Suddenly, after having tamponned the wound cavity, sutured the parietes and applied a dressing, the respiration began to fail and the pulse began to intermit; the anæsthetic (ether) had been stopped half an hour previously. Although stimulation of every kind and transfusion were resorted to, the patient did not rally, but died from shock. The spleen weighed seven and a half pounds.

The case demonstrated the dangers of splenectomy for leukemia from hæmorrhages, and the many adhesions which one may expect to find in such large tumors.

RESECTION OF GUT FOR GANGRENOUS STRANGULATED HERNIA.

DR. A. J. MCCOSH read a paper on the above subject, for which see page 647.

RUPTURE OF THE KIDNEY.

DR. CHARLES K. BRIDGON read a paper on this subject, for which see page 641.