TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY.

Stated Meeting, June 6, 1898.

The President, J. Ewing Mears, M.D., in the Chair.

CHOLECYSTOLITHOTOMY.

Dr. Robert G. Le Conte reported the following case: A man, fifty-eight years of age, enjoyed fair health until June, 1896, when he suffered a severe attack of hepatic colic, followed by others at short intervals. During the fourth attack he was admitted to the Methodist Episcopal Hospital, under the care of Dr. Tunis. The tumor rapidly subsided and the symptoms abated. He was placed on a tonic treatment with large doses of olive oil, and the stools carefully watched for calculi, but none were passed. The bowel movements did contain frequently a quantity of sandy material, which, on examination, proved to be mostly cholesterin. He remained in the hospital eight weeks, gained fifteen pounds, and felt perfectly well. He continued well for several months, when his attacks recurred in a milder form, with considerable intestinal indigestion and fermentation. In only one of these attacks (September, 1897) was the gall-bladder again enlarged. The attacks subsided with a considerable quantity of this sandy material in the stools. He was readmitted to the Methodist Episcopal Hospital April 12, 1898, under Dr. Le Conte's care, just after one of these attacks. He was very thin, weak, and slightly jaundiced. Examination of the abdomen revealed an enlarged liver, extending an inch or more below the border of the ribs, a little harder than normal, with a rounded edge. The gall-bladder could not be detected. The other organs were apparently normal, except that the lungs were slightly hyperresonant. He was placed on a light, nutritious diet, principally milk, eggs, and rare meats, the bowels kept open with phosphate of soda and Hunyadi water, and nitro-muriatic acid administered.

At the end of two weeks he had gained five or six pounds, and felt quite strong again. He was told that his attacks probably depended upon gall-stones impacted in the gall-bladder, although their demonstration was impossible. He consented to operation. Etherized April 27; abdomen opened over region of gall-bladder for a distance of three inches and a half. The transverse colon was adherent to and covered the whole gall-bladder. On separating the adhesions a contracted, small, dense gall-bladder was exposed, adherent through its whole length to the liver, with the fundus about an inch from the anterior edge of the liver. Calculi could be easily felt through its walls. It was immovable and impossible to bring to the surface of the wound. The surrounding bowel was packed off with gauze, a silk stitch passed through the fundus for better control of the organ and its under surface incised for an inch. The walls were nearly a quarter of an inch thick. Six stones were removed, the last being well down in the cystic duct. In addition to the stones, it contained a drachm or two of turbid, mucous-like fluid. The common and hepatic ducts were free from concretions. The gall-bladder wound was then closed with a continuous silk suture, penetrating to the mucous coat, but the attempt to cover this with a running Lembert suture failed, owing to the unyielding rigidity of the walls. A strip of gauze was then packed around the gall-bladder, and the abdomen closed with through-and-through silkworm-gut sutures. No reaction followed the operation. The gauze pack was removed in forty-eight hours, and a small rubber tube inserted for a day. The wound was entirely healed in ten days, and the recovery uneventful.

UNSUCCESSFUL NEPHROLITHOTOMY, WITH SUBSEQUENT PASSAGE OF THE STONE BY URETHRA.

Dr. Le Conte also reported the following case: E. E. S., aged twenty-six years, printer, was admitted to the medical wards of the Methodist Episcopal Hospital February 11, 1897, with symptoms of gastro-enteritis, fever, headache, coated tongue, anorexia, vomiting, constipation, and abdominal pain and tenderness, more marked on right side. These symptoms began suddenly, and were of four days' duration, and gradually subsided three or four days after admission.

Previous History.—Perfectly well until three and a half years ago, when he was suddenly seized with throbbing pain in right lumbar region, lasting two days. Since then similar attacks have recurred every two to four weeks, and latterly the pain has extended to the bladder. The right kidney was high up and difficult to palpate, but no stone could be felt. The patient was advised that renal calculus was the probable cause of his trouble, but he refused to remain for operation. Readmitted to the hospital March 8, 1897, surgical wards, with a history of another similar attack since last admission. Urine twice examined. Phosphates and uric acid abundant, but no blood or pus present. Three radiographs were taken by Dr. Goodspeed, all of which proved negative. To recapitulate: The attacks were always sudden in onset, without apparent cause, with vomiting, pain, and tenderness most marked in the region of the right kidney, and referred to the bladder. Palpation only showed a high position of the kidney; urine without blood or pus, and the radiograph negative; diagnosis, renal calculus. Two days after admission the patient was etherized and a lateral lumbar incision made over the right kidney. Only the lower part of the organ was exposed, and after much difficulty, owing to fibrous bands, the whole kidney was brought down into the wound. Careful palpation of the organ did not show anything, and a needle passed in various directions met with no resistance. The kidney was not opened, and the diagnosis revised to perinephritic inflammation with adhesions. The kidney was returned free of adhesions, a strip of gauze and a small rubber drain inserted, and the wound closed. The recovery was uneventful, but delayed, owing to the drainage track persisting as a small sinus. Discharged April 7; wound entirely healed. About two weeks after his discharge he had another attack of renal colic, lasting about a day, and two days later he voided with the urine a small stone, seven-sixteenths of an inch long by one-fourth of an inch broad. The stone, at the time of operation, was probably caught in one of the calyces, and the manipulations which were practised on the kidney dislodged it, allowing it later to engage in the ureter and be passed. The kidney was not opened at the time of operation, because the operator believed he had been mistaken in his diagnosis, and that the adhesions found were probably sufficient to account for his symptoms.

DR. W. J. TAYLOR remarked that in all cases of kidney operations, whether the surgeon is able to feel the stone in the kidney by means of the needle or not, the kidney should be opened. In many cases the stone is not found by the needle when unquestionably there is a stone in the organ itself, and it does not materially increase the gravity of the operation, if at all, to incise the kidney. If no stone is found, a slight amount of drain can be kept up, which will relieve the congestion of the kidney, and he thought that the future value of a kidney is not materially decreased by such an operation.

DR. BARTON agreed with Dr. Taylor, as he had known of some cases where the stone undoubtedly would not have been found if the kidney had not been opened. He thought it also well to examine the pelvis of the kidney and the ureter. In one case, in which he not only exposed the kidney but incised it and failed to find the stone, the symptoms persisted, and some months after he decided to excise the kidney. After delivering the kidney, and before cutting and ligating the vessels, on running his finger down the ureter, he detected a large stone in a dilated ureter. He incised the ureter and delivered the stone, closing the ureter with a continuous Lembert suture, and, after ligating the bleeding points of the torn kidney, put it back again. The man made a perfect recovery.

DR. LE CONTE said, in rejoinder, that he agreed thoroughly with the remarks that had been made, but in this case the kidney was very difficult to get out. It was densely adherent, and he thought the local condition would probably account for all the symptoms. He did not care to open the kidney, as he could not reach the artery to compress it, and he was a little fearful of hæmorrhage. However, in a stone of this small size, he doubted very much if he would have been able to find it unless he had cut the kidney to a very great extent.

EXCISION OF THE HIP-JOINT.

DR. HARRY C. DEAVER presented a young man, who was admitted to the Episcopal Hospital July 25, 1896, with a history of having injured his hip by falling from a building twenty months previously. Sixteen months later an abscess developed, and was opened, and when admitted was draining through a sinus on the anterior surface of the thigh. He complained of

severe pain, especially on motion. There was no ankylosis, but dead bone could be felt at the bottom of the sinus, which led directly into the joint. Three days after his admittance an excision was made of the head by "Barker's" incision; a counter-opening was made and a drainage-tube was inserted. The case did well. At the end of three weeks gentle passive motion was made. The fourth week he was up on crutches, and was discharged seven weeks after operation. It is almost two years since operation, the wound is entirely healed, and he has good motion in the hip-joint.

DR. WHARTON said that he had had a few cases of anterior excision of the hip, and he thought it to be a very good operation in early cases, where an abscess has formed. You can then remove the dead bone and leave practically all the muscular attachments to the greater and lesser trochanters of the femur. The operation is not an easy one, particularly in adults. Even after dividing the neck of the bone close to the shaft, it is often very difficult to deliver the head of the bone. He had operated on a few young children in the early stages of hip-disease, and here it is a very favorable operation.

With reference to the amount of shortening, it is less than in the ordinary excision, where the head and neck and greater trochanter are removed.

SEPARATION OF THE LOWER EPIPHYSIS OF THE FEMUR.

DR. HARRY C. DEAVER presented a boy who was admitted to St. Mary's Hospital November 11, 1897, having had his left leg caught between the spokes of a revolving wheel of a wagon, and having sustained in consequence a fracture of the thigh through the lower epiphysis. Dr. Deaver saw him the following day, and found the limb greatly swollen at the seat of injury. The lower end of upper fragment could be felt in popliteal space. He opened up the popliteal space in the median line, and found liquid blood and clots and an oblique fracture, the line of fracture extending from without inward, beginning one inch above the epiphyseal line, going through the epiphysis, and extending down into the internal condyle of the femur, and communicating with the knee-joint. He delivered the lower end of the upper fragment, sawing about a half inch off of it, and reduced the

fracture. The wound was closed, with drainage, and the limb dressed in a flexed position at an angle of 135 degrees. Twelve days later the wound was dressed, and the limb straightened out, and put in plaster. Twenty-two days after this the plaster was removed, and passive motion and massage completed the cure. He has now very good use of the limb, with perfect flexion and extension.

DR. WHARTON remarked that this case could hardly be classed as a typical compound separation of the lower epiphysis of the femur. The manner in which it was produced seems to be one in which many such accidents occur. He had seen three compound separations of the lower epiphysis of the femur produced in the same manner; in all of these cases, by reason of the extensive injury to the soft parts and blood-vessels, amputation was required.

DR. HARTE thought that this case, which was not a true epiphyseal separation, but a fracture running obliquely downward to the epiphysis, would go to refute the popular idea that all injuries of the lower parts of the femur in children are epiphyseal separations. It has been stated by a very excellent authority that in all injuries, in relation to joints, the epiphysis being the weaker point, the bone was invariably separated at that point. This case illustrates the opposite view, and you would naturally suppose that in an injury of this sort the femur would give way at the epiphyseal juncture, as it was presumably the weaker point, but in this case the reverse had happened.

POSTCÆCAL ABSCESS OF APPENDICULAR ORIGIN.

DR. HARRY C. DEAVER said that on the 16th of May, 1897, he was called by Dr. Keith, of Schaefferstown, Lebanon County, Pa., to see a young man, aged twenty-two years, who was suffering with a very severe attack of appendicitis. One week previously, while in a five-mile bicycle race, he was taken with a severe pain in his abdomen, which gradually got worse, but being anxious to win the trophy, he rode to the finish. The doctor saw him a few hours afterwards, when he found him suffering with general abdominal pain, vomiting, and extreme tenderness all over the abdomen. The pain was relieved only by large doses of opium (tinctura opii deodorata). When Dr. Deaver saw him

he was in a semi-narcotized state, pupils contracted, pulse 130, weak, and compressible; temperature 99° F., an anxious expression, rigidity of abdominal wall on both sides, but more tenderness on the right side. He had had practically no nourishment since his attack. Dr. Deaver declined to operate, on account of the general peritonitis, his extreme weakness, and seminarcosis, but recommended to withdraw the opium, to encourage bowel movements by enema and calomel by the mouth, agreeing to operate later if he improved. His condition did gradually improve, and two weeks later Dr. Deaver saw him the second time, and found his condition to be very much better; pulse 90, fair volume; temperature 99½°. The general abdominal tenderness and rigidity had subsided, but there was a tender spot over the region of the appendix, with slight fulness, but no fluctuation. He made an incision over this area, and opened up a small abscess cavity, which contained about an ounce and a half of pus, which was not very offensive. He examined the cavity very carefully, feeling that there must be a larger collection of pus elsewhere, as an abscess cavity of this character did not account for the severe character of his illness, but could not find any communication, so he simply packed with iodoform gauze. The patient was under ether twenty minutes; he was considerably shocked. Stimulants were given freely, strychnine hypodermically. One hour after this he began to hiccough, which rapidly grew worse, and continued for twenty-four hours without relief, when he was seized with a violent fit of coughing, which was followed by free expectoration of dirty, foul pus, fæcal in odor. His general condition was very bad, the flow of foul pus through bronchi continued for a week, then gradually subsided, and the patient began to improve, and rapidly convalesced, and was out of bed in one month's time from the operation. In the opinion of the reporter the abscess cavity that was opened was secondary to the collection behind the cæcum and colon, and the appendix was postcolic. When the appendix holds this position it is usually adherent to the colon without any mesoappendix, unless it is at its distal end, where it is sometimes found free with a short mesentery. He had seen this condition in cases in which he had operated for chronic appendicitis. When the end of a postcolic appendix lies high up the extreme point of tenderness may be in the region of the right kidney, and the symptoms may

simulate a perirenal suppuration, or if the base of the appendix be the seat of perforation, the point of greatest tenderness may be in the loin, just above the post-superspinous process. In the case reported this postcolic abscess burrowed and extended along the under surface of the diaphragm, ulcerating through into the right lung, and rupturing into a bronchus. The retching caused by the anæsthetic excited violent contraction of the diaphragm, and subsequent rupture of the abscess cavity. At no time during this young man's illness did he present any symptoms of such a condition.

A second case of postcæcal abscess was as follows: A young man, aged twenty-six years, had been ill two weeks with acute appendicitis; the onset was sudden and severe. He had general peritonitis. Treatment had been "opium and salts." When first seen by Dr. Deaver his temperature was 99° F., pulse 80, with localized soreness over appendical region, some rigidity of right rectus with a decided swelling. His general condition was good, stomach retentive, bowels moving daily, and he was taking sufficient liquid nourishment. He was brought to Philadelphia the following morning, and operated upon at 4 P.M. A large abscess was opened, thoroughly cleaned, and carefully examined, but found completely shut off. He did well for thirty-six hours, when peritonitis set in, which was thought to be the result of leakage from a deeper seated abscess. The abdomen was reopened, and a large abscess cavity was found behind the cæcum, which had dissected up the inner layer of the ascending mesocolon, and extended under the mesentery. The peritoneal cavity was thoroughly washed out and drained. Patient did not react.

In dealing with appendical abscess, Dr. Deaver had found that they vary according to the position of the appendix. When the appendix comes off the lower end of the cæcum, and lies to the outer side, in relation with the iliac fossa, an abscess in this region is easily dealt with. The pus cavity is either opened up as soon as the peritoneum is incised, or the omentum covers the abscess, congested with a small area of inflammatory induration, which locates the abscess with a gangrenous or perforated appendix. When the appendix comes off the base of the cæcum and extends into the pelvis, the location of the abscess depends on the seat of perforation. If it is at the base of the appendix, it will be found underneath the cæcum, and frequently he had

found a secondary abscess in the pelvis communicating with it. When that portion of the appendix occupying the pelvis is gangrenous at perforation, we find the abscess in this region, and if it is of long duration, it may extend as far as the rectum or bladder, and rupture into one of these viscera. A postcæcal appendical abscess may burrow behind the ascending colon, rupturing as it did in the first case reported, may extend under the inner layer of the ascending mesocolon and under the mesentery, as it did in the second case. These two cases demonstrate the importance of early operation in acute appendicitis.

THE TREATMENT OF FRACTURES OF THE NOSE.

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The subject of fractures of the nose is hardly treated in our text-books with such clearness of description as to the character of this injury and its treatment as to enable those not quite familiar with it to decide what course to pursue in the individual case.

Nasal surgery has made such advances of recent years that to do good general surgery one should possess also some of the resources of the specialist. The extent of an injury to the nose is to be discovered by both an external and internal examination. Externally it is to be noted whether the normal outline is preserved. There is frequently a deviation to one side or an obvious depression. The surface should be carefully felt with the finger-tip, as by so doing inequalities which are hidden by swelling may be detected. Lateral movement will usually elicit crepitus. Internally, examination may be obstructed by swelling and clotted blood. The latter is to be carefully washed away by gentle syringing or wiped away with cotton on a cotton-carrier; if bleeding continues, perhaps the use of ice-water or alum or cocaine solution will check it; it is seldom necessary to use packing. Iron salts make too nasty a clot to be recommended, besides being irritating. The use of a head-mirror and speculum is necessary; the largest size oval-shaped ear-speculum is best. Before attempting any extensive manipulation on the inside of the nose, it is desirable to deaden its sensibility; this may be accomplished by wetting a pledget of absorbent

cotton with a 2- or 4-per-cent. solution of cocaine and introducing it. Cocaine-poisoning can occur. I once had a patient, a strong laborer, who, as soon as the pledget was introduced, became deathly pale and faint, and was only restored after being given a liberal amount of ammonia and whiskey, and allowed to lie down for a quarter of an hour. A 4-per-cent. solution of cocaine was used in this case. The use of cocaine in this manner also tends to reduce swelling and

Anchoring a laterally displaced nose by means of a strip of gauze and collodion.

stop any hæmorrhage. Its hæmostatic effect is increased by the addition of 5 per cent. of antipyrin. Instead of examining the patient while sitting he may be placed in the "Rose" position, lying flat on his back, with the head hanging over the edge of the table. The external injury, if marked, consists of a displacement of the bones either antero-posteriorly —that is, the nose is crushed in—or laterally. If the injury

has not been so severe, there may be no displacement or only a slight one. The fragments are sometimes loose and sometimes tight. If the latter is the case, a general anæsthetic (ether) may be given, if thought desirable, while replacement is being attempted. When the bridge has been depressed its elevation may be attempted by introducing a flat steel director (Sir Astley Cooper's), or best by using the flat bill forceps of Adams. To retain it in position, L. D. Mason (*Annals of Anatomy and Surgery*, Vol. ii, p. 107; Vol. iii, p. 81) thrust a pin from side to side through the nose and placed a strip of plaster over from one of its ends to the other. Perhaps a preferable way is to put a piece of cork on each projecting end of the pin and pushing them together until the bridge is sufficiently elevated. The bony deformity in fractures of the nose does not tend to disappear, so that, if it is desired to remedy it, it should be done at once.

To correct lateral deformity, it is often sufficient to simply press the parts back with the fingers. In obstinate cases I have been successful by taking hold of the nose by means of a wet towel. This prevents the fingers from slipping, and gives one a wonderful control over the organ. By pulling directly outward, the fragments can be unlocked and then readily replaced laterally. Success is recognized by the disappearance of the deformity. To correct lateral displacement shields made of lead or gutta-percha have been used; I have not had much experience with them. Adams devised two lateral pads fastened to a head-band and adjusted by a screw. Gamgee ("Treatise on Wounds and Fractures," p. 348) had an apparatus which pressed on one side of the nose by means of a screw and spring.

Quite recently a similar apparatus has been described by Frederick C. Cobb (*Journal of the American Medical Association*, March 12, 1898, p. 588). The difference between them is that Gamgee prevented lateral movement of the apparatus by means of a spectacle frame, while Cobb does so by having a stiff metal head-band fitted carefully to the circumference of the head. I have successfully accomplished the same ob-

ject by taking a strip of gauze and fixing one end to the side of the nose by means of collodion; the opposite cheek is then drawn forward and the other end of the gauze is to be fastened to it by the same means. Thus the nose can be drawn towards the side desired and lateral displacement remedied. It may be noted that the gauze is fastened on its bony portion and not only to its cartilaginous tip. The dressing should be examined, and, if necessary, renewed every other day, so that a constant tension is maintained. These fractures heal very rapidly, so that the dressing may be dispensed with in from three to seven days.

Plastering the nose with sticking plaster serves no useful object, the use of collodion and cotton is better. Deviation of the cartilaginous or bony septum can be determined by ocular inspection or by the gentle introduction of a not-too-large little finger. Intranasal pressure, best exerted by the finger, is more efficacious in pushing and keeping the septum to one side than it is in raising a depressed bridge. Plugging of the nose is disagreeable under any circumstances, and in some intolerable. The use of pins is preferable. They should preferably have a spear point and a flat head lengthwise with the shaft. This head is to be covered with a piece of soft, thin, rubber tubing. They should be introduced while sensation is dulled with local or general anæsthesia and left in place several days. If plugging is resorted to plain cotton is preferable to absorbent cotton, as it contains a small quantity of oil. Inasmuch as the septum is bent towards one side or the other, and not both, it is neither necessary nor desirable to plug both nares; plug only the one towards which the septum is bent. Sometimes plugging the upper portion of the nares only will suffice, leaving a passage on the floor of the nose free for a current of air. The use of hard-rubber tubes to keep the nostrils open and the septum in place may cause excessive pain, and will not be tolerated if there is any pressure exerted by them. A far more comfortable plan is to introduce a piece of soft-rubber drainage-tube. This is very liable to come out, and if it

does, the patient should be instructed to replace it. It is better, however, to rely on pins to keep the septum straight. Dobell's solution, or one made with Seiler's tablets, should be used frequently to spray and cleanse the interior of the nose.

DISCUSSION.

DR. HARTE remarked that there is no bone that recovers so quickly after an injury as the nasal bones, and if not properly replaced at once evil results are certain. In fractures of the nose this point is often overlooked. He thought that in nine cases out of ten of fractures of the bridge of the nose—except of the extreme tip—there is a fracture of the vertical plate of the ethmoid.

His method in dealing with these cases was to use the Adams forceps, carried well in, to forcibly raise up the arch of the nose, then properly replacing the parts with the fingers. Sometimes it may be necessary to plug the nose. Plugging both sides of the nose is a mistake. By plugging one side lateral deflection is more easily corrected. He had never had very much success with the use of catheters, tubes, etc., in the nose.

The great thing in dealing with fractures of the nose is perfect reduction, and that can only be obtained by proper elevation of the fragments by the use of the Adams forceps.