TRANSACTIONS
OF THE
PHILADELPHIA ACADEMY OF SURGERY

Stated Meeting Held October 6, 1924

The President, Dr. E. B. Hodge, in the Chair

COMPOUND FRACTURE OF THE OLECRANON ASSOCIATED WITH FRACTURE AT WRIST

Dr. Hubley R. Owen presented a man, who was admitted to the Jefferson Hospital, January 31, 1924, with an elbow and wrist swollen, and there was a nasty contused wound with considerable devitalization of the tissue around the olecranon. The swelling delayed operation for ten days. He then made an open reduction and sewed the olecranon fragments together with kangaroo tendon. Passive motion on the elbow was begun in ten days after operation. The fracture at the wrist was reduced at once after admission. The patient now has almost 100 per cent. function; except for some slight deformity, the function of the wrist is excellent.

UNUSUAL URINARY CALCULI

Dr. Alexander Randall presented specimens obtained from a man, aged sixty-three years, who entered the University Hospital complaining of burning on urination and marked frequency. In 1911 he was operated on for stone in the bladder by a suprapubic cystotomy; at this operation a group of small stones were removed. In 1918, a second suprapubic cystotomy was performed for recurrent calculus. At this operation a single large stone was removed. In April, 1924, he had an operation for a large incisional hernia, which was successfully repaired under great difficulty due to the size of the hernia and the adhesions present. X-ray at that time revealed the recurrence of vesical calculi, but no attempt was made to remove the same. Following his recovery from the above operation, the patient was transferred to the Urological Service for the removal of his vesical calculi. Due to the unusual size of the stones and the small contracted bladder which was present, it was considered good policy to first attempt a litholopaxy in an effort to either remove the stone entirely by that operation, or at least reduce the mass to a size commensurate with perineal lithotomy. Therefore, May 17, under light gas anæsthesia, a litholopaxy was performed. This was repeated the following week, May 23. Following this the patient was sent home for a period of recuperation. He returned July 18 for his major operation. During this period he had passed large quantities of fragments. After a few day's study, a perineal lithotomy was performed July 22. There was no prostatic hypertrophy found, but it required an extensive resection of the posterior urethra, with ultimately two incisions of the vesical orifice in order to remove two large calcareous fragments found to be in the bladder cavity. These were successfully delivered, as well as numerous smaller pieces. The patient voided through his urethra on the thirteenth day following his operation, and the perineal wound had healed by the fifteenth day. He left for home on the seventeenth post-operative day. He was seen five weeks later, and found to be in excellent shape: his frequency amounted to

twice per night; there was no residual urine, and a No. 28 French sound passed to the bladder with ease.

DOCTOR RANDALL gave also the history of a man, twenty-five years of age, who was admitted to the University Hospital, May 29, 1924, suffering from retention of urine. At the age of eight years he was run over by a wagon, suffering a fracture of the pelvis and apparently a rupture of the posterior urethra. He was operated on shortly after the accident, and a urinary fistula established in the perineum, since which time, now seventeen years, he has urinated only from this opening and never per meatus. During these seventeen years he has had periodic trouble with retention of urine and frequently had to relieve himself by sitting in hot water. Two years ago, during an acute spell of retention, he was placed in the hospital, but does not recall that anything other than local attention was necessary; no operation being performed. In January, 1923, he was a patient in this hospital again for acute retention. He was catheterized through this fistula and drained, and refused at that time any operative interference. During the past three years he has had recurrent attacks of chills and fever at irregular intervals. On the morning of May 29, 1924, another attack of acute retention brought him to the hospital, accompanied by great pain in the hypogastric region. The swollen bladder formed a hypogastric tumor extending two-thirds of the distance towards the umbilicus: the penis is small, atrophic; in the midline of the perineum there is a pinhole opening through which urine is oozing slowly. A filiform was passed into his bladder through the fistula and with this as a guide a small Gouley catheter was passed with great difficulty and a large quantity of foul ammoniacal urine removed; the filiform was left in for drainage. Immediately following this instrumentation, the patient had a marked chill lasting several minutes. Two hours later he again complained of pain in the bladder region and a small woven catheter was successfully passed and a little over 100 c.c. of cloudy urine removed, giving relief. The catheter was left in place. During the succeeding ten days attempts were made to dilate the perineal fistula by increasing the size of the indwelling catheter. Finally it was possible to pass a metal sound, which elicited a characteristic grating sound of a calculus, and X-ray demonstrated a large vesical calculus and several smaller ones, pelvic bones showing evidence of old injury. Owing to the intense pain the patient suffered during any attempt at instrumentation, the persistent elevated temperature and the leucocytosis, a suprapubic cystotomy was performed, June 11, 1924; bladder cavity found to be small and contracted, with markedly inflamed mucous membrane, but without any calculus. On passing the finger into the posterior urethra, a stone was felt external to the internal sphincter, and lying in the prostatic urethra. Being impossible to retract the calculus through the sphincter, it was crushed *in situ* and removed in fragments, followed by copious lavage: the bladder was closed about a suprapubic drain. The patient was then placed in lithotomy position; the perineal fistula was dissected to its passage through the triangular ligament; the proximal end of distal urethra was found to be completely closed; it was opened and an end-to-end anastomosis attempted over a No. 14 French catheter, after which the perineal wound was closed with a gauze drain in place.

During the succeeding four weeks the patient had a remarkably septic temperature, ranging from 99 to 104.6. Following one severe chill on June 24, a temperature of 105.4 was recorded. During this time his suprapubic drain functioned ideally and he was eliminating in excess of 3000 c.c. daily. His

perineal wound did not heal and it was generally pussy. Daily irrigations with sounding at intervals were given.

During the succeeding month the general condition of the patient exhibited a profound sepsis to overcome which, two intravenous 1 per cent. mercurochrome infusions were given, and three blood transfusions, and finally an intravenous injection of gentian violet, all with little influence on the patient's condition. Death occurred August 17, sixty-six days after his first operation. At autopsy there was found a diffuse low grade suppurative pelvic cellulitis without abscess cavity formation and without involvement of the peritoneum; there was likewise a low grade suppurative pyelonephritis more marked on the left side with marked thickening of the pelvic walls, the condition evidently one of long duration, probably developed during his period of urinary straining in the years gone by with moderate exacerbation since operation. Both ureters were dilated and chronically inflamed. The only actual pus was found in the sheath of the left rectus muscle, probably having its origin during the last ten days of life, when proper care of his suprapubic wound was difficult. The seminal vesicles were normal. The cavity in the prostatic urethra from which the calculus was removed, though found at autopsy to be coated with pus, had under this a granulation tissue surface showing a moderate amount of healing, and of course was daily cleansed by urine and irrigation when dressed, as drainage of it was both pendant and free. There was one pocket off of this cavity that admitted the tip of the finger, in which was found a small residual fragment of stone, though communication with the larger cavity was open. Remaining abdominal and thoracic viscera were negative.

Dr. A. P. C. Ashhurst said that on August 1, last, he found a man in the ward of the Episcopal Hospital who was said to have a carcinoma of the prostate. On inserting his finger into the man's rectum he felt a hard prostate apparently inoperable. Three days later, however, it was reported that the man had not passed urine since the night before, that efforts to pass a catheter had failed, and that he was in great pain. The reporter tried to catheterize him and could not get any flexible instrument to enter the bladder. He then tried a metal catheter and struck a stone. Although the man was in very bad shape (uræmic and septic), he decided to operate. He cut down in the perineum on the end of a sound and found a stone (8 by 4.5 by 4 cm.) impacted in the urethra and behind that a second stone (4.5 by 4 by 3 cm.), also in the urethra. There was much pus. On putting the finger in the rectum the carcinomatous prostate had vanished! It was apparently a normal prostate. The man was fifty-two years old, and he died seventeen hours after the operation.

Gross, in his *System of Surgery,* states (1872) that Sabatier referred to a case where an urethral calculus was found weighing three ounces, and that Duméril had seen one which was nearly three times as heavy. These two specimens shown together weighed over six ounces.

SEVERE ELECTRIC BURN COMPLICATED BY TETANUS

Dr. Hubley R. Owen reported the case of a fireman in a neighboring city, who, August 9, while at a fire with the nozzle of the hose in his hand, came in contact with a high-powered wire. His hand was immediately thrown

into tonic convulsion; he maintained his grasp of the nozzle and was unable to release, his hold. His fellow firemen had to knock the nozzle from his hand. When seen by Doctor Owen the man had a moist gangrene half way up his forearm. His hand was still in contracture, so that he could not possibly straighten out his fingers. He remembered a case four years ago in which they were puzzled to know how a man met his sudden death while under a trolley; the question arose as to whether it was due to natural causes or to electric shock. Doctor Wadsworth was called in consultation and demonstrated the marked rigidity of the muscles, contracted by the shock of the electric current. Doctor Owen noted the difference in the rigidity of the muscles of the lower and upper extremities. In the case he was now reporting, he advised immediate amputation. Forty-eight hours after the operation the man developed the first symptoms of tetanus, from which he died. The only other case lost in the Police and Fire Departments of Philadelphia was from tetanus, following a burn. This case was back in 1883. In his work in the fire department, he made it a rule to give tetanus antitoxin as a prophylactic, not only in burn cases, but in cases where there was devitalization of the tissue. In the Cooper Hospital, of Camden, there is hardly a week goes by that they do not have a death by tetanus. This is not to be wondered at, when one realizes that they draw their cases from an agricultural district. He thought that more stress should be laid on the use of antitoxin in civil practice.

Dr. George M. Dorrance said that tetanus was endemic in the locality of Camden. There had been one case in the St. Agnes Hospital which came from Camden. It was a case of compound fracture which occurred in the man's house. He had been interested in watching the results with the employees of the Campbell Soup Company, of Camden, where they have been giving a lot of tetanus antitoxin and where there had been no tetanus. In his opinion the disease is probably caused by the soil coming from the river.

PERIRENAL HYDRONEPHROSIS WITH COMMENTS ON THE TECHNIC OF ABDOMINAL EXTRAPERITONEAL NEPHRECTOMY

Dr. Benjamin Lipshutz read a paper with the above title, for which see page 498.

Dr. Leon Herman was reminded of a woman who was admitted to the Pennsylvania Hospital with a large mass in the left upper abdomen. On differential kidney study it was found that the function on the side of the mass was about the same as that on the side of the supposedly healthy kidney, both being within normal limits. This of course suggested that the mass was of extrarenal origin and probably not connected at all with the kidney. A pyelogram showed that the left kidney pelvis was lying transversely across the body of the first lumbar vertebra, and that the left ureter had been displaced across the vertebral column, so that it was lying parallel and almost in apposition with the right ureter. The diagnosis was of a left-sided retroperitoneal mass with displacement of the kidney. Doctor Klopp operated transperitoneally, removing a cyst the capacity of which was 1300 c.c.

The speaker could not see how a case of this kind could be diagnosed with certainty; it may be determined that the mass is connected with the kidney, but this is as far as one can go in diagnosis. In the case referred to, the

cyst was loosely connected with the kidney and could be peeled off and had caused only slight pressure atrophy of the renal substance. Experience with this condition is limited, since simple serous cyst of the kidney is an extremely rare lesion. In such a case the abdominal extraperitoneal method has much to recommend it, especially in these cases in which the diagnosis is uncertain.

Stated Meeting Held November 3, 1924

The President, DR. E. B. HODGE, in the Chair

REMOVAL OF SCREWS AND PLATES AFTER INSERTION IN BONE

DR. A. P. C. ASHHURST read a paper with the above title, for which see page 528.

THE RELIEF OF PAIN IN CARCINOMA OF THE FACE

DR. FRANCIS C. GRANT presented a paper with the above title, for which see page 490.

DOCTOR ASHHURST said that in these cases he occasionally injected the branches of the fifth nerve for pain in the face, but when inoperable carcinoma occurs in the neck, the only thing he had done was to burn the greater part of the carcinoma off. Doctor Fay has divided the upper cervical roots intradurally and thus relieved the pain in the neck. But cautery excision is a simpler procedure. When one takes off the top of a carcinoma of this kind the patients get immediate relief from pain and live in comparative comfort. The immediate relief of the pain is as striking as when a carbuncle is excised. But this relief does not last forever. The patients have an open sore, of course, but this can be radiated afterwards.

DR. GEORGE M. DORRANCE said that the method described by Doctor Grant had been used in Blockley Hospital for two or three years. He now had a case there who has had carcinoma of the jaw for seven years. He has had no recurrence of sensation since the injection. He thought the time during which they are free from pain following the injection is longer than that stated by Doctor Grant one year. He had seen one case which lasted eleven years after the first injection, another, nine years, and another seven years. On the other hand, he had seen a case in which sensation returned in nine months. However, this was quite exceptional. After an injection one should wait for several weeks to see whether the nerve had been really reached or whether the alcohol was merely injected around it. The duration of freedom of pain depends on whether one has gotten the nerve itself or only the area surrounding it. If, one month after injection, there is anæsthesia, the chances are it will last well over a year.

DR. FRANCIS C. GRANT rejoined that Doctor Ashhurst was quite correct in his statement that cautery excision of a malignant growth about the face will relieve the pain in some cases. In other cases, the pain is not relieved and in every case, no matter how treated, the repeated dressings are extremely painful. It is this suffering particularly, that may be relieved by the alcoholic