TRANSACTIONS
OF THE
PHILADELPHIA ACADEMY OF SURGERY

Stated Meeting Held October 9, 1922

The President, DR. JOHN H. JOPSON, in the Chair

TRAUMATIC POPLITEAL ANEURISM

DR. HUBLEY R. OWEN presented a man in whom this condition had developed.

DR. A. P. C. ASHHURST raised the question whether this was really a case of traumatic popliteal aneurism. It is possible that he had the aneurism before he got hurt. If it developed after the injury, it seems more likely to be an arteriovenous fistula than an aneurism. Apparently, the examination has not been complete enough to show whether the branches of the femoral artery below the aneurism pulsate or not. From a practical point of view, he thought the thing to do was to cut down and see what it was. After three months there would have been developed a sufficient sac wall to suture, and it was quite possible that it was not the main trunk of the popliteal that was involved but a branch.

RECURRING PERFORATIONS OF STOMACH AND DUODENUM

DR. H. A. MCKNIGHT presented a man, aged thirty-three, who was first admitted to Dr. Morris Booth Miller's service at the Polyclinic Hospital October 2, 1908, complaining of pain in the epigastrium, gaseous eructations and chronic constipation. He was operated two days after admission.

In the stomach was found a punched-out ulcer, perforated, on the lower and under side, about an inch from the pylorus. The ulcer was turned in with a purse-string suture.

The patient was again admitted to the hospital February 2, 1910, with a history that four weeks following his operation he began to have attacks in which his stomach would swell and he would suffer from pains of a sickening character in the epigastrium. The pains are very severe and last for several hours. Several hours following the acute attack he regurgitates a large amount of gas and some fluid and feels relieved. After this the pain disappears very rapidly. These attacks of pain were repeated every three or four weeks and are confined to the epigastrium. Examination at this time showed nothing but an incisional hernia in operation scar. He was again admitted to hospital January 22, 1911. He now gives a history that two months before admission symptoms became worse and he began having severe pains in the abdomen at the lower costal margin about 1.5 inches from the mid-line. These pains would last from a few minutes to several hours and were worse at night.

They were sometimes relieved by eating and sometimes followed the taking of food. Two weeks ago he began to vomit. Vomitus clear fluid. Abdomen distended with gas.

At operation, January 23, 1911, the pylorus was found almost occluded by old scar. The posterior wall of stomach was exposed in the usual manner and a posterior gastro-enterostomy performed. Hernias repaired. The next hospital record of this patient is March 1, 1920, when he was admitted for one day with a diagnosis of acute indigestion. He was admitted again January 1, 1921, with a diagnosis of gastroptosis and partial closure of the gastro-enterostomy stoma. He gives a history of pain in the epigastrium, diarrhœa and abdominal distention.

X-ray examination, marked gastrectasis and retention of about one-fourth of the opaque meal at the end of twenty-four hours. No evidence of gastro-enterostomy. No evidence of carcinoma, though the pylorus could not be clearly defined because of a very large stomach. Obstruction most likely due to the cicatrix of an old ulcer.

January 21, 1921, the abdomen was reopened through an upper right rectus incision; gastro-enterostomy opening enlarged. A Rovsing gastropexy performed and the greater curvature of the stomach sewed to the anterior abdominal wall. Stomach was opened but no evidence of ulcers found. Patient felt fine until March 23, 1921, except for an occasional pain in the epigastrium. He was admitted to the hospital March 23, 1921, with the history that he ate his lunch and felt all right; three hours later he began to feel bloated in the upper abdomen and to have severe pain in the epigastrium. He did not vomit until medicine was given. He was admitted about eight hours after onset of symptoms in great pain and shock with a board-like rigidity of the upper abdomen, and enormous distention.

Operation performed at once. Upper right rectus incision. On opening the peritoneum a large amount of air escaped. The peritoneal cavity was full of fluid. There were many dense adhesions between the stomach and the anterior abdominal wall the result of the suspension. The stomach was also adherent to all surrounding structures: liver, gall-bladder, colon, etc. Due to the plication of the stomach it was with great difficulty delivered, but on delivery a small perforated ulcer was found on the anterior surface of the stomach near the greater curvature and toward the cardia. It was quite some distance from the gastro-enterostomy, which was found patulous, no other ulcers were discovered involving the gastro-enterostomy or jejunum. The perforation was closed with a purse-string, oversewed with chromic gut, the adhesions were released, the omentum was tacked over the ulcer, and the pelvis drained. A culture from the peritoneum showed bacillus coli and streptococci. He was discharged February 6th from the hospital in good condition. On April 22, 1921, he was free from pain or discomfort. On this date another X-ray was taken, which showed a patulous gastro-enterostomy at the junction of the lower and middle thirds of the posterior surface. No evidence of a patulous pylorus. This part of the stomach ends abruptly. It is very smooth and regular. There is very marked and exaggerated peristalsis quite irregular with deep incisura and persistent

in the lesser curvature directly opposite the enterostomy. No filling defect may be due to spastic condition of stomach.

On May 18, 1922, at 6 A.M., while moving in bed patient had a sharp pain in the upper abdomen. The abdomen suddenly became distended. He was brought to the hospital at 8 P.M. Examination revealed a markedly distended abdomen tympanic all over. Pulse good, no shock, no temperature. Again the abdomen was opened; a large amount of fluid and air was found in the peritoneal cavity, with much plastic lymph and reddening and agglutination of the intestines. Stomach was inspected, no opening found. The gastrohepatic omentum was opened and a perforated ulcer found on the posterior wall of the stomach at about the middle of the organ. The lesser peritoneal cavity contained fluid. The perforation was closed with a purse-string suture of chromic gut and a cigarette drain was placed in the lesser peritoneum and pelvis.

Patient reacted very well, but after twenty-four hours showed signs of a diffuse peritonitis and died May 21, 1922, three days after onset of attack.

PERFORATING WOUND OF THE KIDNEY WITH SECONDARY NEPHRECTOMY

DR. H. A. MCKNIGHT reported the history of a case, premising by saying that incised or punctured wounds of the kidney are relatively rare, only about 200 cases have been reported, and the large majority of these are gunshot wounds and therefore are not true stab wounds.

Keen in 1896 collected 155 cases of injury to the kidney, and of these only 8 were penetrating and caused by direct stabbing. Keen also quotes Küster, who in 7741 injuries seen in the clinics of Basel and Berlin, could tabulate only ten cases of this character or about one in a thousand, and of these ten, only one was an open wound; of 2610 autopsies at the same clinics there were 13 injuries of the kidney and only one of a penetrating nature.

The case he had to report was a stab wound of the left kidney, with secondary operation about two months after the primary operation in a patient with a hæmoglobin of 12 per cent. and a pyonephrosis.

The youth, aged fifteen years, was admitted to St. Mary's Hospital May 4, 1921, after having been transported in an automobile hearse from a nearby town. He had been stabbed by another boy with a carving tool, and on admission was bleeding profusely from a wound in the loin over the left kidney. He passed bloody urine frequently and complained of pain in the loin and over the bladder region. He was operated the next day by the surgeon on service.

The kidney was exposed by a loin incision over the wound, and was found to be punctured in the lower pole on its posterior surface with a grooved wound of the cortical substance. The capsule was loosened, raised and separated for a considerable distance by extravasated blood. The bleeding was slight, and as no urine was seen flowing from the puncture, the capsule was sutured and the wound packed with gauze.

The patient reacted well from the operation, but for several days continued to pass bloody urine which finally became clear. Two weeks

after the operation he was up in a chair and three days later was up and around. The next day, however, he was suddenly seized with a sharp pain in the loin and again passed bloody urine. This condition continued. One week after operation his blood count was: reds, 1,959,000; whites, 7600; hæmoglobin, 38 per cent. On May 25th, he had a red count of 2,080,000 and 30 per cent. hæmoglobin. His blood count continued at about these figures until July 1st, one month after his injury, when he came under the care of the reporter. He now had a blood count of 1,720,000 reds, 4000 whites, and a hæmoglobin of 30 per cent., with nucleated reds, transitional cells, polychromatophilia and poikilocytosis. On July 17th, his reds had dropped to 1,390,000 and his hæmoglobin to 20 per cent.

All this time the patient had been passing blood in his urine, and at times following a severe pain in the loin, would pass complete blood casts of the ureter six to eight inches in length. He had been running a normal temperature up to this time, but suddenly his temperature rose to 104° and his white cells to 10,600 and hæmoglobin dropped to 15 per cent.

On July 20th, he was transfused with 800 c.c. of blood taken from his assailant, a boy of twelve years. His hæmoglobin now rose to 25 per cent.

One week later he had a red count of 1,150,000, a white of 24,000, and a hæmoglobin of 12 per cent. The kidney was now exposed under a very light ether anæsthesia. Many adhesions were encountered, and when the kidney was separated a large amount of pus was found internal to the organ and surrounding the pedicle, which bridged the abscess cavity. A Wertheim clamp was placed on the pedicle, but when tightened cut completely through it due to the softened and necrotic condition of the tissues. Six large clamps were applied to the stump, only a small amount of blood being lost, and the wound was packed with gauze and the patient returned to bed. The clamps were removed in five days and a light gauze packing placed in the wound.

He was discharged from the hospital October 3rd, four months after his injury with a hæmoglobin of 75 per cent. and his wound completely healed.

The removed kidney showed a perforation at the lower pole just below the middle of the organ, which extends in an upward direction, perforating the anterior surface at a higher level. On section there is found a large white organized clot about one inch in diameter involving the cortex and extending down to the pelvis; this clot is surrounded by a red clot about one-quarter inch thick.

Dr. John H. Jopson said he had operated on two cases of wounds of the kidney, due to high explosives; both required nephrectomy. One was a young man, whom he had showed before the Academy, where removal of the kidney was performed, a wound of the liver packed, and the patient recovered after a secondary empyema. The other case died of an associated wound of the liver, which is common. In both of these cases a nephrectomy was indicated due to the laceration of the kidney on the right side.

Dr. D. L. Despard said that recently he had had three cases of very diffuse hemorrhage from the kidney due to trauma, but in no case was there a wound. In one he had to open the abdomen on account of a ruptured spleen, and he had a chance to observe the tremendous hemorrhage which took place in the retroperitoneum as a result of the wound to the kidney. One case, a boy of eighteen years, bled very profusely from a ruptured spleen, and on opening the abdomen there was an extensive retroperitoneal hæmatoma. The boy's condition did not justify the removal of the kidney. In neither of the other two cases was any exploration of the abdomen made; the injury to the kidney was made evident with profuse bleeding through the bladder.

Dr. John F. X. Jones read a paper with the above title, for which see page 68.

ABSTRACT OF PAPER BY DR. DONALD GUTHRIE ON "PRACTICAL HOSPITAL PSYCHOLOGY"

Dr. Donald Guthrie, of Sayre, Pa., read a paper with the above title. He premised by saying that one of the chief causes of post-operative psychosis in the surgical patient is poor anæsthesia. He laid special stress on the advisability of having anæsthetics given by those competent and well trained. The anæsthetist should be a skilled psychologist and have a personality which can readily apply different kinds of suggestion to different individuals. At the beginning of any anæsthetic—chloroform, ether, nitrous oxid—a mixture of eight parts of suggestion and two parts anæsthetic is the best one known. If the fears of the patient can quickly be allayed by a constant stream of suggestion she will no doubt go to sleep quietly and recover from the anæsthetic in the same state of mind. The older text-books of surgery show cuts illustrating the stage of excitement during the anæsthesia. The services of five or six of the strongest helpers in the hospital were enlisted to control the patient during this period. These terror-stricken individuals invariably woke up in just the same frame of mind in which they went to sleep—kicking, struggling, screaming, and trying to flee from something terrible. Is it any wonder that these frightened, starved, dehydrated, strychnined-lashed patients had anything but a horror of our hospitals? The writer may be wrong in his belief that the subconscious mind goes to sleep last and is the first to recover in anæsthesia, but there is much evidence to support it.

The anæsthetist is the most valuable member of the operating team, and if properly trained and with the right personality, can do more to rob the surgical patient's mind of fear than anyone else.

Can anyone witness the successful anæsthetizing of young children and see child after child put to sleep without crying, without struggling, without fright, and not admire the great skill that is being shown in suggestion and hypnotism; and, after seeing a screaming, struggling child asphyxiated by a poor anæsthetist, who of us is in the position to say just how much or of what type of future mental ill health may have its origin in the fright caused by this bad anæsthesia?

For the past two years he had been using music during anæsthesia to a great deal of advantage. He had an old-fashioned sweet-toned music-box in use while children were being anæsthetized with ether. It has been remarkable to see how the music attracts the child's attention and enables the anæsthetist to put children to sleep without fright. He also uses music during the recovery from nitrous oxid and oxygen anæsthesia. When the operation is completed and the patient allowed to wake up absolute quiet is maintained. Excitement during the recovery from nitrous oxid and oxygen anæsthesia, which is so common, is greatly lessened—in fact many patients will pass into a natural sleep, and he had had many of them speak of the delightful sensations the music seems to have caused during the awakening period.

It is important to have the patient recover quietly from the anæsthetic in a recovery room. She must be administered to by a nurse who has been specially trained and who will assure her that the operation has been successfully performed and that her condition is excellent. Quiet, calm assurance at this time that everything is as it should be works better than sedatives, although it is essential that immediate post-operative suffering be controlled by morphine. He gives frequent doses of morphine for the first two or three days, and large amounts of fluids by mouth and rectum soon after operation. Everything possible is done for the comfort of these patients. After operation nurses are with them constantly and they have frequent visits from the surgical staff. The apprehensive patient who is allowed to suffer cannot be convinced that her condition is satisfactory—it is far from being so to her—and she fears an unsatisfactory or fatal outcome. The services of a corps of efficient, loyal, well-trained nurses, who love their work, and who look upon it as an art and not a trade, at this time are indispensable.

Dr. H. K. Mohler said that the hospital personnel needs to hear very frequently these points emphasized in Doctor Guthrie's paper. Nothing could do more towards improving the treatment rendered by a hospital to its patients than to require everyone who has to do with a surgical patient, to undergo an abdominal operation about once every two years. It is true that an anæsthetist who has taken an anæsthetic, all other things being equal, is a better anæsthetist than one who has not taken an anæsthetic.

The question of convalescence is one not thought of enough, and deserves greater consideration than it has received, both from the standpoint of the patient and the hospital. As soon as it is safe to move a patient he should be transferred to more pleasant and cheerful surroundings than exist in a surgical ward in the hospital. By this Doctor Mohler means preferably to a convalescent home, and incidentally it should be a home for convalescents and not for incurables. The atmosphere of this home must be one of cheer and sunshine. The transference of patients to a convalescent home as early as their condition will permit will release surgical beds which are so urgently needed in almost every large hospital at certain seasons of the year. Convalescent homes are economical both to the patient and to the hospital.

More cordial relations between attending physicians and the patients will often result in better results. Recently a surgeon told Doctor Mohler of several patients which were greatly benefited by conversation with their surgeon, who convinced them that their limitation in motion of the arms was not as great as the patient imagined. Less than five minutes talk by the surgeon resulted in the patient developing more motion in his recently healed fracture of the forearm than he believed he would ever attain.

Dr. D. J. McCarthy said he thought the important matter to consider was whether the method put into effect by Doctor Guthrie at Sayre could not be done equally well here in the Philadelphia hospitals. Doctor McCarthy said he did not know of any better illustration than what had been accomplished in the psychopathic wards at Blockley. He said they used to be frightful, but the kindly attitude of the new chief, Doctor Ebaugh, had transformed them into as pleasant a place as it was possible for these patients to be. How would be the best way to apply Doctor Guthrie's principles to large city hospitals, like the University and Jefferson. The responsibility rests with the directors of the hospital, the staff, and they should be made individually responsible for the attitude and conduct of their department of the hospital. Doctor McCarthy said that in his hospital services he always made it a point to specially instruct his people that if a patient complained about treatment, about the bill, etc., every effort should be made to have things corrected or adjusted to suit the patient so that he will want to come back to the hospital and that service.

As to the psychopathic ward, Doctor McCarthy said there was no question at all as to the merit of the suggestion Doctor Guthrie had made. If you have a nervous patient who has never before been to the hospital and if he or she has to wait in the reception room for hours before being taken care of, the patient becomes very dissatisfied, and in some cases may leave the hospital before being admitted to the private room or ward.

He thought the nursing situation was a serious one, and that in psychopathic work especially it was especially essential to have nurses who were properly trained to meet patients, since one without proper training may undo in a few minutes the work which it has taken months to do.

When it was necessary to do a minor operation on a very nervous patient, he would rather not take it to the operating room, but take the chance of infection in the patient's room than have the patient scared to death. It was the neurologists who got the results of the surgical operations,—the post-operative neurasthenics; many times not because the surgeon had failed in his operation but because the preparation and post-operative treatment of the patient had not been properly followed out.

Doctor McCarthy said that he believed that all of Doctor Guthrie's suggestions could be applied to a large city hospital just as well as to a small hospital, but that it would take time and trouble. In most cases it would mean doing to the hospital what the manager does to a hotel if he wants to make it first class; reorganizing from the door all the way through the hospital.