thetising the patient, both examined the papilla. Every other papilla was pale and healthy, but this one was bright red and fleecy. I now took a Volkmann's spoon and cut the papilla and fully half the Malpighian

Fig. 1.—Angioma of a papilla in Miss L.; removal; cure of a five years' hæmaturia.

pyramid out. The wound leaked urine for a couple of weeks and then firmly and finally closed. No blood was seen after the first dressing of the operation wound and the urine at once became brilliantly clear. The tenderness in the right loin disappeared. She has remained well ever since, becoming stout and active.⁴

Description of Papilla.—On examining this papilla under water I saw that it was not villous as I had supposed, but that the vessels of the mucous membrane clothing the papilla were markedly varicosed. Mr. Targett kindly examined the specimen for me and reported there was no evidence of growth, but there was a congestion of the vessels with extravasation of blood and an increase in the cellular stroma. This might be, suggests Mr. Targett, an early stage of a fibromatous condition such as is not uncommon in the tips of the papillæ.

CASE II.—Alarming Hæmaturia: Profound Anæmia: Cystoscopy: Renal Pelviscopy: Papillectomy: Cure.

History.—I was asked in September, 1899, by Dr. Wigg, to examine a lady, aged 30, suffering from profuse hæmaturia. The hæmorrhage had appeared fourteen days previously without any apparent cause and without any symptom to mark the origin of the blood. No renal cells, nor growth-fragments, nor tubercle, nor casts could be discovered (Clinical Research Association). Cystoscopy showed streams of bloody urine to be issuing from the left ureter, the bladder was healthy, astringents were powerless.

Operation.—The hæmorrhage became so violent and the patient so exhausted that I operated a week later, bringing the left kidney out on to the loin. It was absolutely healthy, likewise its pelvis and ureter. I opened the common pelvis and washed away the collected blood. The mucous membrane was healthy, but as fast as I washed away the dark blood, more issued from the lower branch of the pelvis. I therefore slit it up through the kidney substance, separated the incision by means of retractors, swabbed out, and threw in the electric light. (Fig. 2.) I now saw a

Fig. 2.—Angioma of papilla in Miss B.; removal; cure of profuse hæmaturia.

bright red varicosed papilla precisely similar in appearance to that which I encountered in my first case. Eight or ten medical men examined the papilla with me, and I was able to assert that this small point was the source of the hæmorrhage, and that by cutting it out the hæmorrhage would be arrested. My statement was received with much reserve, for it was hardly credible that so dangerous a hæmorrhage could originate from so small an area. I scooped out the papilla, and I am glad to say my prognosis was verified. No blood has appeared since, and the loin has healed. Mr. Targett reports that "the vessels in this part of the kidney are distended with blood, and there is some extravasation."

These are the bald facts of my two cases. They demonstrate

the reality and power of nerve control over the renal blood supply, for both secretion and bleeding ceased in my first case (and in several others, male and female) directly I examined with the cystoscope. They show, therefore, the value of an unexpected cystoscopy. They point to the importance of examining the renal pelvis by the aid of a strong light; to the extremely small source of an uncontrollable hæmorrhage; to the precision and ease with which such a source can be removed; and to the needlessness of mutilating the cortex for this purpose. Finally, I submit the subject as a probable clue to a cause for those painless unilateral renal hæmaturias which have so long puzzled and baffled the physician by their obscurity, persistency, and danger.

NOTES AND REFERENCES.

¹ Rovsing: BRITISH MEDICAL JOURNAL, 1898, vol. ii. p. 1547. ² It is necessary to repeat the special designation of this class. In these days of hurried reading the false impression may be obtained that I am here referring to all classes of painless renal hæmaturia. ³ Author: Solitary Ulcer of the Bladder, BRITISH MEDICAL JOURNAL, May 6th, 1896, p. 1133. ⁴ Patient had a very slight relapse a few weeks ago, that is, eighteen months after the operation, but is again well.

A CASE OF ABDOMINAL NEPHRECTOMY FOR RENAL SARCOMA IN A YOUNG CHILD.

By CHARLES A. MORTON, F.R.C.S.,

Professor of Surgery in University College, Bristol, and Surgeon to the Bristol General Hospital and to the Hospital for Children and Women.

THE mortality of nephrectomy for sarcoma of the kidney in young children has been so high that it is encouraging to be able to add another to the list of cases of recovery from the operation:

History.

The child, 18 months old, was seen, in consultation with Dr. Cotton, on August 4th, 1898. She had been taken to Dr. Cotton some weeks before because her mother discovered blood trickling down the inside of the thighs from the vaginal orifice. Later distinct hæmaturia was noticed and an abdominal swelling appeared.

Clinical Characters of Tumour.

On August 6th an examination of the abdomen was made under chloroform, and a large, hard, lobulated mass was felt on the left side. It consisted mainly of two parts, one coming forwards to the middle line in the region of the umbilicus, the other extending downwards into the left iliac fossa, but both connected with another mass in the renal region. The whole mass was movable and could be easily pushed backwards into the loin. I could not make out any resonant area in front of it or feel any band lying over it like an empty contracted portion of colon. It was possible to get my fingers between its upper border and the costal margin. There were no signs of any enlargement of the other kidney. The urine at this time was found on microscopic examination to contain a few red corpuscles. The position of the growth, in association with the hæmaturia, left little doubt as to its nature. The great risk of the operation and the great probability of recurrence after operation were described to the parents; but they decided to give the child the chance of benefit from removal of the growth, and they were fortunate in this decision, for the child lived for five months after the operation.

Operation.

The child was admitted into the General Hospital on August 15th, and I operated on the 18th. When examined under the anæsthetic, the tumour was found to be distinctly larger than on August 5th, and extended slightly across the middle line in the region of the umbilicus. The free mobility of the growth in the left side of the abdomen was very striking. I exposed the growth by a small incision in the left semilunar line and found the empty descending colon lying across it. I could readily feel the other kidney, and failed to detect any enlargement. I then enlarged the incision, so that it extended from the costal margin to an inch above the pubes. When thus fully exposed, the tumour was found to consist of numerous lobules of various sizes and very soft and elastic, with the exception of one small nodule at the lower part, which was as hard as cartilage. Numerous large veins were seen ramifying over the growth, under the posterior layer of the meso-colon. I divided the posterior layer of meso-colon and pushed the colon towards the middle line, and then shelled the growth out of the surrounding connective tissue, until I came to the pelvis of the kidney and the large vessels entering at the hilum. I ligated the ureter in two places, and divided it between the ligatures; but the renal vessels were too much on the stretch to be dealt with in this way, and I had to secure them with pressure forceps before division, and ligate them after. I tied the renal veins separately, and then all the vessels together in one ligature. Then, after ligature of some vessels passing between the tumour and the surrounding connective tissue, I was able to shell out the mass. I made a small opening from the loin for the insertion of a drainage tube. The meso-colon was not sutured. The incision in the abdominal wall was sutured in three layers. There was very little blood lost during the operation and but a slight amount of shock was present.

Description of Tumour after Removal.

The growth was as large as a good-sized cocoa-nut, and consisted of three main masses. One had projected across the median line of the

abdomen, another had extended into the iliac fossa, and the third into the pelvis, and, had a rectal examination been made, might have suggested a pelvic origin of the tumour. The upper half of the kidney projected from the mass, and the whole of the posterior aspect of the kidney could be recognised spread out on the tumour, which seemed to have started in the lower and anterior aspect of the kidney. The tumour con-

Posterior aspect of the growth. A, growth; B, upper part of kidney; C, large round mass of growth.

sisted of a dull yellow, very soft tissue. In one incision made into it a cyst, the size of a marble, containing a viscid yellow clear fluid, was found, probably a degeneration cyst. There was over every part a well-marked capsule.¹ Microscopic examination showed the tumour to be a round and spindle-celled sarcoma mixed with well-formed gland tissue here and there—an adeno-sarcoma. The gland spaces were not degenerating renal tissue but clearly new formations.

Progress after Operation.

With the exception of a temperature of 100° for a few days directly after the operation she had no symptoms. The drainage tube was removed on the third day, and the wound healed by primary union and the stitches were removed on September 4th. She was discharged shortly after in good health.

After-History.

In November, Dr. Cotton reported emaciation, loss of appetite, and a few crepitations at the base of the lungs, and she gradually failed, and died on January 16th, 1899. Dr. Cotton made the *post-mortem* examination, and kindly informed me that there was no local recurrence, but the lungs were full of minute tubercles, and the mesenteric glands were enlarged and caseous in parts. The right kidney was about the size of the adult organ.

How long the child would have lived without recurrence had she not been attacked by tuberculosis is, of course, impossible to say. I did not urge operation, in fact, I did not even recommend it, but as it gave a slight chance of recovery, the parents were glad to have it done notwithstanding its risks and the great chance of recurrence of the disease.

Dr. George Walker, of the Johns Hopkins Hospital, published in 1897² a very important paper on sarcoma of the kidney in children, based on the collected records of 145 cases. He could only find 4 cases on record in which the child had lived for three years after the removal of the growth, that is, four cases of cure according to the three years rule. Two of these were cases operated on by Abbe, of New York, and in one of them the growth was so large as nearly to fill the abdomen. The other two cases of cure were operated on by Israel and Schmidt.

Concetti,³ from a study of published statistics, estimates that there are 7 per cent. of cases in which there has been no recurrence for two years, and states that not more than 9 or 10 cases of absolute cure after operation are known at present. Dr. Walker gives the mortality of nephrectomy for renal sarcoma in children as 38.25 per cent., and says that most of the deaths were from shock. The removal of the growth is said to prolong life from 8.08 months—the average duration without operation—to 16.77 months. Concetti gives a mortality from operation of 40 per cent., but both he and Walker advise operation. Walker says: "Although the cures are very few, still, in consideration of the invariably fatal termi-

nation of this malady without interference, I unhesitatingly advise operation, for it offers the only hope; and at worst it means only an accelerated death." With this I cannot altogether agree. It means the chance of immediate death in about 1 case in every 3 operated on, a prolongation of life by some months in those patients who survive, and a so-called cure in only 4 cases out of 145 recorded. I think it is a matter for the parents' decision whether the risks incurred are worth the chances of benefit if the child survives the operation. Some parents would no doubt take the chance, others would rather not run the immediate risk. Except in the very early stage, we could, I think, hardly recommend operation. In Kelynack's book on renal tumours will be found the various opinions expressed by surgeons in the past as to the desirability of operating in these cases. There is one hopeful fact, and that is that the mortality has diminished of late years.

REFERENCES.

¹ The specimen was shown at a meeting of the Bristol Medico-Chirurgical Society, December, 1898. ² *Annals of Surgery*, 1897, vol. xxvi, p. 529. ³ *Ref. Med.*, May, 1898; EPITOME, BRITISH MEDICAL JOURNAL, 1898, vol. ii, par. 66.

CASES OF OPERATION FOR INTESTINAL OBSTRUCTION.

By JAMES TAYLOR, F.R.C.S.,

Senior Surgeon to the Chester General Infirmary; Consulting Surgeon to the Wrexham Infirmary.

I THINK that the following cases of operation for intestinal obstruction possess sufficient points of interest to warrant publication in the pages of the BRITISH MEDICAL JOURNAL.

CASE I.—I saw Mr. E., aged 33, on July 15th, 1897, with Drs. Williams, of Oswestry, and Richmond, of Overton. Always had good health up to present illness, except slight attacks of lumbago and indigestion. On June 10th of this year, in the forenoon, he had been struggling with a cow, trying to dress its feet, then went to market, returned, had a good tea. About 7 P.M. he was reaching up to a shelf, when he had a sudden violent pain in the abdomen, over the region of the stomach, great tenderness, no vomiting, skin cold and clammy, pulseless, temperature 97°. Dr. Richmond gave him ether and strychnine, and by the following morning he had somewhat recovered. On the 13th an enema was given; a good evacuation resulted, but there was at once a repetition of the pain, cold surface, and pulselessness. After a few days of tolerable comfort there was an inclination to have the bowels moved, a small amount of fecal matter passed, and at once the same prostration, pain, and tenderness. These symptoms occurred again and again at intervals of a few days. The last time anything fecal passed was on June 26th. During the other attacks there was only the great inclination, a little mucus, great abdominal pain, and prostration. On June 23rd the abdomen was seen to be slightly distended, and the knees were drawn up. The day before I saw him stercoraceous vomiting was added to the other symptoms. On the 15th he was feeling better, although the stercoraceous vomiting continued, and he had severe pain at times. Operation was proposed, but as he was easier it was not done. Afterwards the pain increased, the fecal vomiting continued, accompanied by great restlessness, and he decided to submit to operation. On July 19th I performed a laparotomy; on opening the peritoneal cavity, a quantity of dark fluid blood escaped; no intestine was seen at first, only omentum, which was adherent across the front of the pelvis. After separating these adhesions, the pelvis was found to contain a quantity of blood clot, which I removed in handfuls; adherent to the omentum and behind it the sigmoid flexure was bent sharply over into the pelvis, and was held down by the omentum adherent to it and to the walls of the pelvis; these adhesions were easily broken down. I brought the bent part of the bowel up to the wound, where I stitched it to the skin; as it was considerably inflamed and very oedematous, I deemed it wise to open it. He was slightly sick and restless on the two days following the operation. On July 22nd Dr. Williams reported that the patient was doing well, passing flatus by rectum. Later the same day, Dr. Richmond records that a small motion was passed by the rectum: wound healthy, no pain. 26th: All satisfactory. 30th: Dr. Richmond reports that a scab over the lowest stitch came away, and a quantity of dark-brown discharge; he put in a drainage tube. On three occasions a large quantity of fecal material came from the wound in the bowel. After this the patient slowly recovered, the wound in the bowel closed, and the last I heard of him was that he was at Rhyl quite well.

CASE II.—Mrs. L., aged 60, under the care of Mr. Moreton, of Kelsall. I saw this patient on August 2nd, 1897. She had been suffering from symptoms of acute intestinal obstruction for several days. Operation was proposed, but consent was not given until the following day. On the 3rd I opened the abdomen. Distended small intestines presented themselves. After examining the usual places—left and right iliac regions and hernial apertures—and not there finding anything, I began passing the distended bowel between my fingers inch by inch. At length the bowel ceased to come. I traced it down to somewhere near the brim of the pelvis, where it was adherent. Whilst examining its connections I felt the adhesions giving way under the gentle pressure, and, continuing to separate these adhesions, the bowel in a few seconds became free, coming forwards to the wound. The bowel exhibited a curious nipple-like projection at the part constricted; this projection, even whilst we were looking at it, began to lose its form; the wound was then closed. She made a good and tolerably rapid recovery.