used after the operation slipped past the point of rupture with perfect ease.

In Case IV, while no interference with urination was noticed, a narrowing of the urethra was found. This narrow point was, however, not a hard cicatricial stricture, but was so soft and yielding that without the least exercise of force it was rapidly dilated to a good size.

These results would certainly encourage a continuation of attempt to promote immediate union of the urethra when divided by violence.

The operation is not a difficult one. A median incision opens the blood cavity about the urethra. After the clots have been turned out, a sound passed down the urethra quickly shows us the anterior end. If the urethra is not fully divided across, the rent is then easily seen and rapidly repaired. When the division has been complete, the posterior end may not be so easily found, but in a fresh rupture the profuse bleeding which occurs from the bulb of the urethra, instead of obscuring our search, serves as a guide to that which we are seeking. If then, the bleeding point in the posterior part of the wound is seized with forceps and pulled forward, the collapsed and retracted end of the urethra will be brought to view. In a case of longer standing, when the bleeding has stopped the search may be more difficult, in which event firm pressure should be made above the pubes to force the escape of urine to serve as a guide.

In all of these cases the suture was made with interrupted catgut stitches, which were all placed before any of them were tied. Care was taken to include only the cavernous and muscular tissue in the stitches and not to encroach on the mucous membrane. In every case, upon tying the stitches, the hemorrhage immediately stopped.

CONCLUSIONS.

(1) In cases of ruptured urethra, immediate perineal section with suture of the urethra should be practised.

(2) By this procedure not only do we greatly lessen the danger of urinary infiltration and abscess, but we also, in a large proportion of cases, may hope to prevent the formation of close intractable strictures.

(3) In an early operation the search for the posterior end of the urethra is much easier than it is later. The hemorrhage from the branches of the artery of the bulb serves as a guide to that end of the canal.

Clinical Department.

CARCINOMA OF RIGHT KIDNEY.

BY F. W. JOHNSON, M.D.

KATE W., white, fifty-five years of age, married, entered the Carney Hospital, November, 1895. Her father died of old age. Her mother died of "a tumor in the side." Dr. Malcolm Storer saw her in the out-patient department and made a diagnosis of tumor, probably of the right kidney. From her appearance, and from the history of the case he considered the growth malignant.

For some eighteen months previous to entering the hospital she had had sharp pains in the right side, and frequently had passed bloody urine. For over a year

she had noticed a lump in the right side which, she thought, had steadily been increasing in size. Often the pain extended down the right thigh. Night-sweats, nausea and vomiting had been present.

The pain in the side was constant, requiring morphine for its relief. She was much emaciated, the skin was of a yellowish, muddy color, and the conjunctivæ were yellow.

The urine was pale, acid, and contained a large trace of albumin. The quantity in twenty-four hours was fifteen ounces. The sediment contained a considerable number of blood and pus corpuscles, single and in clumps. Renal cells with oil drops adherent, and hyaline and finely granular casts were present.

On palpation a freely movable, non-sensitive tumor, which caused a marked bulging of the anterior abdominal wall, could be felt in the right side over the region of the kidney. It was so movable, both without and with ether, that a tumor, with a long pedicle, starting from the pelvis was thought of, and not excluded until after the abdomen had been opened.

November 9th an incision, parallel to the median line and six inches in length, was made over the tumor. The part first reached was sub-peritoneal, but it was soon found that the disease had passed through the posterior parietal peritoneum and had involved the intestine, mesentery and omentum. The mass brought to view was about the size of a child's head.

Further examination showed the mass to be connected with the right kidney. This was freed from its adhesions, and the renal artery, vein and ureter were tied separately and divided.

On delivering the growth it was found to have involved the colon, which was firmly attached to it. The attachments were divided and the tumor removed. A piece of the omentum as large as half of my hand was infiltrated with the growth and was removed.

The intestine about the tumor appeared everywhere infiltrated with carcinoma for a distance of from five to six inches. For a distance of eight inches along the intestine the mesentery was divided and a V-shaped piece as large as my hand was removed. Eight inches of the intestine, going well beyond where the disease was visible, were resected, an end-to-end anastomosis being done. The cut edges of the mesentery were brought together with an over-and-over suture of fine silk, and were attached to the under surface of the intestine at the point of anastomosis. The intestine at the place of operation was carefully wrapped in the omentum and then tucked in on all sides with Peake & Buzzell's iodoform gauze.

On the day following the operation little urine was passed, and there was considerable nausea and vomiting.

On the second day the amount of urine increased, with a corresponding improvement in the patient's condition.

On the fourth day part, and on the sixth day, the remainder, of the gauze was removed. No fecal fistula occurred, and union took place by first intention except where the gauze was placed.

On the fifth day the bowels were moved by calomel.

On December 8th the patient was discharged. She had been free from all pain for some ten days, had gained in weight, and was passing from 30 to 40 ounces of urine in twenty-four hours.

In answer to a letter, sent by my assistant at the

hospital, she wrote, February 26, 1896, that she was suffering considerable pain in the right side, that the bowels pained and troubled her a great deal, and that she could not get strong. She had not been out of the house since getting home from the hospital.

Dr. W. F. Whitney's report:

The tumor of the kidney received Saturday shows a large, somewhat lobulated mass, the size of the fist, occupying one end of the organ which is replaced by it.

The capsule of the kidney is directly continuous over the growth. On section it is found to be partly fibrous and partly soft, with areas of softer, opaque, whitish and slightly hemorrhagic substance in the midst of the fibrous tissue. It is quite sharply differentiated from the rest of the kidney substance, which presents but little structural change.

Microscopic examination shows it to be made up of solid masses of small epithelial cells which had rapidly undergone a fatty degeneration.

Diagnosis, cancer; but its origin and finer histological details will require time to be worked out. The intestine removed presented no changes beyond those due to the invasion of the disease into the peritoneal coat.

Medical Progress.

RECENT PROGRESS IN OBSTETRICS.

BY CHARLES W. TOWNSEND, M.D.

ECLAMPSIA.

E. HASTING TWEEDY¹ believes that, with the exception of the removal of sepsis as a cause of death, the present statistics of eclampsia bear very unfavorable comparison with those of former years, and he thinks that the proofs are convincing that we are not at present moving along rational paths.

Chloroform, chloral and bromide of potassium act as powerful depressing agents to the heart and tend to kill in precisely a similar manner to that of the eclamptic poison. Furthermore, the anesthetic is generally applied during a convulsion only, with but slight effect in lessening the severity of the attack; and by limiting the amount of oxygen passing into the lungs, it in some cases actually increases the severity of the fits. Pilocarpine, he believes, is a most fatal drug for uremic patients, because of its action on the heart, and in promoting free salivation and bronchial secretion. He does not believe that severe sweating is a justifiable proceeding, and hopes soon to see it more generally condemned.

In the uremic coma, fluids which form in the mouth and are increased by the use of pilocarpine and anesthetics, as well as the drugs that are given, find their way more easily into the lungs than the stomach. This tendency is increased by the fact that the patient is generally left lying on the back, and also by the gag which prevents swallowing.

The treatment by immediate delivery in eclampsia, Tweedy considers unsound in theory and disastrous in practice, and one of the most serious complications of eclampsia is the onset of labor. Induction of labor and forced delivery by exposing the patient to the air, by reflex stimulation, by abdominal palpation, and above all by dilatation of the cervix are all prone to aggravate the eclampsia. In proof of this he presents

the statistics of Dr. Green from the Boston Lying-in Hospital, from which Dr. Green had drawn an opposite conclusion.

At the Rotunda Hospital for the last three years the treatment has been hypodermic injections of morphine, beginning with one-half a grain, and followed every two hours by one-fourth of a grain, until either the symptoms are alleviated, or until two grains have been given in twenty-four hours. If, in spite of this, labor sets in, forceps are applied as soon as the os will safely admit their application.

The best authorities, he states, agree in believing that opium has but little action on either the heart or kidneys. Brunton states that the secretion from the kidneys is at times increased by its employment. It is a drug which lessens metabolic changes (thus limiting toxin formation), a nervous sedative of the first order, and lastly, one that dries up salivary and bronchial secretions. All practical experience goes to prove it is not dangerous to the fetus in the uterus.

Blood-letting, especially done twice at an interval of two hours, he believes of great value, relieving the kidneys, drying up bronchial and salivary secretions, diminishing venous congestion and removing an absolute amount of toxin from the body. No nourishment should be given during the attack, and any medicine should be administered through a nose-tube, or better still, the rectum.

In conclusion, he urges the necessity of attention to small details.

S. Seabury Jones² comes to the following conclusions as regards eclampsia:

That he who saves four out of five women who have been attacked by eclampsia before or during labor may consider that he has been fairly successful.

That we have medicines powerful for good, and that they should be given a fair trial before resorting to *accouchement forcé* in actual convulsions.

That, at a period when the fetus is viable, especially at the end of the eighth month, if the patient suffers from severe premonitory symptoms, such as anasarca, severe and persistent headache, and the eye symptoms, and particularly if the evidences of nephritis have persisted for some time in spite of treatment, premature labor should be induced in the interest of the mother and child.

That in the actual presence of convulsions we should endeavor to overcome them by the use of proper medicines and remedial measures, notably by the use of veratrum viride, morphine, chloral and chloroform, rather than appeal to the rapid emptying of the uterus.

That in veratrum viride we have a remedy powerful for good when properly used, but that of Norwood's tincture it is better not to inject more than five to ten minims for the initial dose, to be followed by doses of five minims at intervals as required to hold the pulse, and that it is well to combine it with morphine.

Zweifel³ analyzes 129 cases of eclampsia that have occurred in his clinic in Leipzig. Formerly he avoided rapid delivery on the ground that the irritation caused by the manipulations increased the number of paroxysms. In later years he employed rapid delivery under chloroform which he much prefers to ether in these cases, and the comparative results of the two forms of treatment are as follows: Under the

² Medical Record, April 25, 1896, p. 586.

³ Centralblatt für Gynäkologie, 1895, Nos. 46, 47, and 48.

¹ Dublin Journal of Medical Sciences, March, 1896.