interest. The dense adhesions between the ileum, sigmoid, and the abdominal wall rather point to a delay in the re-establishment of peristaltic action after the first operation, due probably to the administration of opium. Unfortunately I have been unable to obtain any notes of the ovarian operation.

The second case is very interesting, since acute obstruction as a result of a complication of parturition is uncommon. The long-continued use of purges and of croton oil in cases of obstruction is now seldom met with, and in such a case, where faecal vomiting had existed for forty-eight hours, the result of an operation is not usually satisfactory. It is interesting, too, to note the extreme collapse which followed the free action of the bowels; I have noticed a similar condition after the relief of other cases of obstruction, such as strangulated herniae or colotomy. The treatment of such collapse by intravenous saline infusion is, I think, original, and the patient probably owes her life to Mr. Pardoe for his prompt and successful employment of this remedy.

Some doubts still exist with regard to the propriety of performing a primary enterectomy and anastomosis during acute obstruction, but if healthy gut be chosen a successful joint ought to be obtained. In this case I may not have chosen absolutely healthy gut for my anastomosis, since two of the sutures apparently loosened and I found it necessary to insert a supporting row of Lembert's sutures afterwards.

In another Maunsell's anastomosis of my own and in two of a colleague's, where no supporting row of sutures had been used, a temporary faecal fistula appeared on about the tenth day after the operation; all the cases, however, ultimately got well. It, therefore, does not seem to me to be quite safe to perform this method of anastomosis without a row of supporting sutures, and, if this be necessary, perhaps Maunsell's method of suturing is not essential, and the anastomosis might be effected by the row of Lembert's sutures alone. In neither of my cases of anastomosis by Maunsell's method have there been any symptoms of stricture of the intestine.

FIXATION OF LIVER AND BOTH KIDNEYS IN A CASE OF GLENARD'S DISEASE.

By F. WINSON RAMSAY, M.S., F.R.C.S.E.,
Surgeon to the Royal Victoria Hospital, Bournemouth.

E. I., aged 39, widow, was admitted to the Royal Victoria Hospital on June 11th, 1895, complaining of incontinence of urine, scalding pain in the abdomen, worse before passing urine, and a tumour in the left hypogastrium. She had typhoid fever when 18, and gastric ulcer when about 20 to 25. Has three children, youngest 4 years. Her present illness dates from April, 1895, when she had an attack of influenza; she did not "lay up," but since has never felt quite well. For several weeks past has had rather profuse leucorrhœa; has been quite unable to work for some weeks. The tumour was diagnosed as a floating left kidney. Examination revealed a completely anteverted uterus; this was replaced, and with complete rest and vaginal injections the symptoms complained of disappeared. The kidney was still tender and gave a deal of discomfort when sitting or standing up. Operation was recommended and accepted. On May 4th preceding Professor Vulliet, of Geneva, read a paper before the Swiss Medical Congress at Lausanne describing a new form of kidney fixation, and the result in the one case in which he had performed it; the description was so enticing and the result so satisfactory that I determined to repeat the operation. As this operation is not generally known, I will describe briefly its steps.

On July 2nd, the patient being on her right side, the usual loin incision was made, the kidney being readily found; it was freed from connective tissue, and found to have a long and perfect mesonephron; this was stripped off so as to expose the outer or posterior surface, the wound packed with gauze and temporarily closed. The patient being turned a little more forward a second incision was made, about 2 inches long, a little to the left of the spine, its lower end reaching to the first lumbar spinous process. The skin and superficial fascia being cut through, the strong deep fascia was exposed; this being divided revealed the flat tendinous

structure of the longissimus dorsi muscle, its fibres running upwards and slightly outwards; a portion of it, about one-sixth of an inch wide, being selected was separated with a knife sufficiently to allow a finger being introduced underneath it; forcible traction then being made, it broke away from its insertion into the rib above, with its attachment to the first lumbar spinous process still intact. The tendon thus obtained was about 10 inches in length; there were some muscular fibres still attached to it, and these were trimmed off with scissors. The flank wound now being reopened, with one hand inserted into it and the other at the back wound, the structures of the back could be readily palpated and recognised. The tendon was threaded on a long pedicle needle and passed right through the muscles of the back, so that while one end was attached to the first lumbar process, the other was free on the abdominal side of the back at the upper part of the normal kidney bed.

Incisions about one-fourth of an inch were now made near the upper and lower borders of the kidney through the capsule, and the tendon, again by means of the pedicle needle, drawn through underneath the capsule from one incision to the other, thus underrunning about five-sixths of the length of the kidney; the tendon was then passed in the same way back through the muscles, so that its free end was again in sight at the back incision. The kidney then being firmly pressed into its normal position, the tendon was drawn taut and fixed safely with silk to its adjacent tendons. The muscles divided in the loin incision were sutured with buried silk sutures, and both wounds closed and dressed. The wounds healed by first intention, but on the second day the temperature rose to 103°, the patient got restless and semi-delirious, and left her bed and walked about the ward. In a few days she developed a regular attack of melancholia. Inquiry revealed the fact, until then not ascertained, that she had suffered from similar attacks before. Her bodily health improved, but her mind remained in the same state for a month, when she suddenly recovered and left the hospital on August 29th in fair health, shortly afterwards resuming her work as charwoman.

She was readmitted on February 20th, 1896, complaining of sickness, pain in the right side, and a tumour in the right hypochondrium. She had received so much benefit from the first operation that she was anxious to be relieved, if possible, by operation again. The right kidney was found to be freely movable in the abdominal cavity, but the left kidney could not be felt at all; the liver was noticed to be rather lower than usual, but she was examined only in the recumbent position.

On February 25th the right kidney was fixed in the same manner as the left. The wounds healed by first intention; there was no rise of temperature, and the patient rapidly convalesced without any of the untoward symptoms which had marked the first operation.

On the patient being allowed to sit up the nausea and vomiting returned, and, according to the patient, the tumour had also "come down again." On examination, the kidney could not be felt whilst the patient was in bed. She was now examined in the erect position, and it was found that the liver, which in the recumbent posture seemed in its normal position, pivoted round on its left lobe, so that its right lobe fell downwards until it occupied the middle of the abdomen below the umbilicus. It was freely movable on its axis, the right lobe being easily pressed into the left hypogastrium, or back into its normal position. It seemed smaller than usual, was slightly painful on pressure, and its movement immediately set up nausea and emesis. The patient was willing to undergo any operation that promised relief.

On April 24th, 1896, ten months after the first operation and two months after the second, the abdomen was opened by an incision 3 inches long through the middle of the right rectus muscle; the left kidney was first searched for, and found to be immovably fixed high in its normal position; the right kidney was in good position, lower than the left, and could be moved slightly laterally but otherwise well fixed; the liver was found to move freely as before described, the suspensory ligament being very much elongated. The upper surface of the liver was rubbed hard with some aseptic gauze to try to promote adhesion; in order to do this it was necessary to extend the wound another couple of inches; the round

ligament was now transfixed close to the liver, and a stout silk ligature passed through and round it and then tied; one end was then passed by means of a sharp Macewen's needle from above downwards round the costal cartilage of the seventh rib; the liver then being firmly pressed into its place the two ends were securely tied, thus fixing the liver by means of its round ligament to the thoracic wall. As, in spite of this, the extreme right lobe seemed too mobile, a double kangaroo tendon was passed through the liver about 2 inches from its right border, and then through the adjacent parietal structures sufficiently to get a good hold. There was free bleeding from the needle puncture, but it stopped immediately the ligature was tightened. The liver was now firmly fixed in good position.

The rest of the abdominal organs were examined. The spleen was in its normal position; there did not appear to be any lengthening of the mesentery or mesocolon; the right ovary was cystic, about the size of a small tangerine orange; it was removed through the same incision. The other ovary and uterus were healthy.

The wound was closed in the following manner: A series of silkworm-gut sutures were passed through all the structures and held temporarily in forceps, then the posterior sheath of the rectus and the peritoneum were drawn together with a continuous silk suture, and afterwards the anterior sheath of the rectus in the same manner; the interrupted silkworm sutures were then tied and cut off, and the wound dressed with double cyanide gauze.

Convalescence was uninterrupted. There was a slight rise of temperature on the third day, which soon fell to normal; the sutures were removed on the tenth day, and the wound found healed. The patient was kept in the recumbent position for a month, and left the hospital, with her symptoms relieved, on July 6th. She was shown by me at the October meeting of the Dorset and West Hants Branch of the British Medical Association, and was then gradually getting stronger.

I saw her last a month ago, meeting her accidentally in the street. She had had no returns of her symptoms, had put on flesh, and was quite strong and well, and able to return to her work and support herself and her children.

In this case there did not appear to be any ptosis of the stomach or bowels, and therefore the term "Glénard's disease" is not strictly correct; but I have applied the name as somewhat descriptive of the condition of the patient.

Hepatoxy is not a common operation. Richelot¹ reports a case in which a displaced liver was found in a case of supposed typhlitis. It was fixed in its normal position with favourable results. E. Areilza² also reports a case of supposed hydatid cyst, which on operation was found to be a floating normal liver, and in which fixation was followed by cure of symptoms.

In both these cases, however, the condition of the liver was only diagnosed on operation; but Mr. Treves³ reports a most interesting and successful case, in which the operation was undertaken with other measures for the relief of general abdominal ptosis, and in which the result quite justified the treatment.

As regards Vulliet's method of kidney fixation, I consider it much superior to other forms of nephrorrhaphy. It is simple, easy of performance by any ordinary surgeon, is not dangerous, and, if properly carried out, certain in its results. I have fixed several other kidneys since, and each one has been a marked success, not only as an operation, but in its relief of symptoms. In one case there was slight tingling of the urine first voided after the operation, otherwise there has been neither hæmaturia nor albuminuria detected. In one case the wound suppurated, and I was afraid the tendon might slough; but this did not happen, and the result was as satisfactory as in the cases which had healed by first intention. In my last case, the tendon obtained was too short, so I took two, passing one through above and the other below to the kidney bed, and then, after passing the upper one under the capsule of the kidney, tying them together, and, for further security, stitching the free ends to the adjacent tissues. Experience has caused me to modify somewhat the operation. In passing the tendon through the first time it should pierce the structures of the back horizontally, or even a little upwards, but, on returning, it should leave the

anterior surface at a distance below its entrance to correspond to the length of kidney underrun, and then run obliquely upwards and backwards to appear again at its point of entrance in the back wound. This is done so that when the tendon is pulled taut it draws the whole surface of the kidney against the back, and does not crinkle up the capsule of the kidney, and cut its way out. The operation has been successfully performed by my colleague, Mr. Bernard Scott, and Mr. Heygate Vernon, of Boscombe, and if the results of other surgeons are as good, I think the operation will soon be recognised, and supersede other methods of nephrorrhaphy.

REFERENCES.

¹ *Medical Press and Circular*, July, 1893. ² *Rev. de Med. y Cirurgia Practica*, July 5th, 1896. ³ *BRITISH MEDICAL JOURNAL*, January 4th, 1896.

REMARKS ON THREE CASES OF HEAD INJURY.

By HARCOURT COATES, L.R.C.P., M.R.C.S.,
Senior Honorary Surgeon of the Salisbury Infirmary.

CASE OF FRACTURE OF THE LEFT PARIETAL BONE AND BASE OF THE SKULL, WITH INSENSIBILITY AND BLINDNESS LASTING THIRTEEN WEEKS: RECOVERY.

H. R., aged 41, was riding on horseback on March 12th, 1896, and was thrown. He was found, probably half an hour after the accident, lying insensible in the road, and removed home in a cab.

I saw him soon after. He was then in a semi-comatose condition: he could be roused to a slight extent when sharply called, but could explain nothing about the accident, and immediately relapsed into an unconscious condition, sleeping heavily, with stertorous breathing. During the night he passed urine and fæces into the bed. There was copious hæmorrhage from the nose. I found a large hæmatoma over the left parietal bone, but in the centre of this was a distinct depression, which is, to a certain extent, still present; some bruising of the face; a large amount of extravasated blood over the whole of the left side of the face and neck, and extending on to the chest wall, and a very considerable subconjunctival effusion on the left side. The pupils were equal in size, sluggish, but acted feebly to light. There was well-marked ptosis on the left side, and external strabismus of the right eye. The pulse was 60, and the temperature normal. The other reflexes were normal. The respiration was stertorous.

An ice bag was applied to the head, and at 10 P.M. he began to show slight signs of returning consciousness. At 3 A.M. he vomited, and again several times during the night. At 7 A.M. Cheyne-Stokes breathing commenced, he was completely unconscious, and there was loss of pupil reflex. The pupils were dilated. The ice bags were taken off and nourishment administered *per rectum*, and in a quarter of an hour after the removal of the ice bag the respiration was normal. At my request I met Mr. Christopher Heath in consultation at 3 P.M., when the condition of the patient was unchanged, and under these circumstances a bad prognosis was given. The temperature had run up to 101° F., and the pulse was 90.

On March 14th, at 4.30 A.M.—that is, about thirty-four hours after the accident, an epileptic attack occurred, lasting fifteen minutes, the spasms being most violent in character, and commencing in the right arm, extending rapidly up to the face, with conjugate deviation of the head and eyes to the right. The fits recurred at somewhat regular intervals up to 11 A.M., leaving the patient in a most prostrate condition. These epileptic attacks were apparently controlled by frequent injections *per rectum* of 2-drachm doses of bromide of potassium. The ophthalmoscopic examination did not give any evidence of optic neuritis.

After the subsidence of the epileptic attacks the patient seemed to gain ground, although unconscious. He could be roused sufficiently to take nourishment, but immediately relapsed into his previous condition. The blindness, as tested by passing a sudden light before his eyes, remained unaltered, but his hearing was most acute, the slightest sound causing him to start up in bed. He remained in this condition until March 25th, the thirteenth day after the accident, when delusions occurred with much noisiness, suspicious of people