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.

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REMARKS ON THREE CASES OF HEAD INJURY.

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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

coming to take him away, and occasional violence of behaviour. Iodide of potassium and bromide of potassium with ammonia were administered, and it was found that the application of an ice bag for a few minutes during the violent paroxysms at once controlled his violence, and generally resulted in a quiet sleep.

On April 25th, after apparently progressing more satisfactorily with regard to his strength, he had five well defined epileptic attacks, lasting for three or more minutes, with the same characteristics as the former attacks, with intervals of about twenty minutes between them; but it was noticed that immediately after these attacks he looked about him and tried to see things, although he could not describe anything that he might have seen, as he was still incoherent.

After this, with the exception of occasional attacks of violence, the patient went on gradually gaining strength, until on June 11th he recognised me when I came into the room, and very shortly afterwards the delusions were cleared away, and some power of coherent thought was gradually established. The return of sight was most curious to watch. Everything seen was out of proportion; for instance, a large screen appeared to him like a small picture, the ceiling seemed to be within reach of his hand, and colour blindness was present for some days after this period. He was able to sit up a little on June 23rd, and went on making a good recovery until July 31st, when attempting to do a little business quite against my advice, an epileptic attack occurred lasting for ten or twelve minutes, having the same characteristics as those previously described.

State One Year after the Accident.—He is cheerful, and has gained strength, and completely regained his memory with regard to things which occurred before the accident; but the accident itself and the subsequent events of three months and a half are buried in oblivion. The sight has returned perfectly, and he will soon be able to return to business. There is no confusion of ideas or headache, and, in fact, the brain functions are now perfect.

In this case there were evidently two entirely separate lesions, one involving the left motor area as indicated by the Jacksonian epilepsy, the attack commencing in the right hand and the conjugate deviation of the head and eyes to the right. These convulsions were evidently due in the first place to the cerebritis surrounding the effused blood, and possibly to a depressed and splintered inner table of the parietal bone on the left side. Had the state of the patient allowed, I should certainly have trephined at this point, but taking into consideration the probable state of the base of the skull and the general condition of the patient, I shrank from exposing him to the additional shock that this operation would cause him, whilst not disregarding the mechanical effects of the trephining upon the grave bone lesions at the base of the skull. The fracture of the base probably involved the cribriform plate of the ethmoid, as shown by the hæmorrhage from the nose, which could not be explained otherwise as there was no sign of direct violence in this region, and the oozing of a thin sanious fluid occurring during the first week after the accident. Thus the ultimate danger of infection by sepsis was prominent.

The left orbital plate was probably fractured by a fissure extending diagonally across the base through the sphenoidal fissure on the right side, involving the sixth nerve and ophthalmic vein. My reason for saying this is the presence of the internal strabismus, which, though less, is still present. The total blindness is most difficult to explain, taking into consideration the lapse of time before sight was re-established. It was probably due to the pressure of extravasated blood at the base, involving both optic nerves or the optic chiasma, or both optic tracts, more likely the nerves. The light reflex arc from the retina, *via* the optic nerve, tract, and geniculate bodies and third nerves was at first present and disappeared later; this renders the supposition of progressive hæmorrhagic pressure more likely. The hæmorrhage into the left orbit would account for the ptosis by pressure. I may add that it was the opinion of an eminent expert who, having heard of the case, wrote to me more than once that in all probability there was division of the optic nerves, and I feared that this was the case in consequence of the lapse of time which occurred before the recovery of sight. I cannot complete these notes without thanking my assistant, Mr.

Gilbert Kempe, and also the nurses from the Salisbury Nurses' Home, for the invaluable assistance they afforded me, which so much contributed to the happy termination of a most anxious case.

TWO CASES OF DEPRESSED FRACTURE OF THE SKULL.

G. B., aged 15, was seen on the evening of March 18th, 1897. He had been kicked by a horse about two hours previously. He was sensible, answered questions rationally, but was much collapsed. Upon examination, I found a ragged lacerated wound the size of a florin at the junction of the coronal and sagittal sutures, and a small incised wound $\frac{3}{4}$ inch long between this and the right ear. The hæmorrhage was extremely free, and the collapse was increasing. Beneath the former wound the skull could be felt fractured and depressed over an area the size of a five-shilling piece. I enlarged the wound by a crucial incision, and removed depressed fragments of many sizes, the largest being $1\frac{1}{2}$ by 1 inch. The depressed fragments were denuded of periosteum and fissured in every direction; therefore I did not think it safe merely to raise them and leave them *in situ*.

There was a wound in the dura mater, and brain substance was observed in the wound. It was important to arrest the hæmorrhage, which apparently proceeded from the fracture extending into the longitudinal sinus, and was very profuse, and from the edges of the fractured bone and also from between the dura mater and skull. That from the edges of the bone was arrested by the application of aseptic wax as recommended by Professor Victor Horsley, and which succeeded admirably. Firm pressure of the dressing arrested the remaining hæmorrhage. In addition to the serious lesion described above, the outer table of the parietal bone on the right side was depressed, and also there was considerable subconjunctival effusion of the right eye with a very marked proptosis, this being strong evidence of a fracture of the base in addition to the other injuries. This patient is making a most satisfactory recovery, and the wound is granulating rapidly. The proptosis is gradually becoming less prominent, and the lad, although very dull, is able to answer questions, and, as far as one can foretell, will make a good recovery.

W. P., aged 17, admitted to the Salisbury Infirmary on March 1st, 1897, was leading a horse, which kicked him on the head. He lay unconscious for a short time, and then walked home a distance of a quarter of a mile. Two hours after, on admission, he was unconscious and his limbs were twitching. There was a wound of 4 inches long over the left frontal bone, extending from the middle of the vault of the skull to the inner angle of the left orbit, down to the bone, which was in fragments. There was evidence of brain substance in the wound, the result of a minute wound of the dura mater. My colleague, Mr. Luckham, in my absence, seeing that there was no time to lose, enlarged the wound and removed the loose fragments, and the lad has made a most satisfactory recovery. The temperature never rose above 100.8°, and the case caused no anxiety.

With regard to these two last cases, youth and unimpaired constitutions—the result of a hard-working, not overfed, out-of-door life—may have been factors conducive to the somewhat rapid recoveries from such serious injuries, added to the fact that the treatment was prompt and antiseptic rigidly carried out. The cyanide dressings were used. In the last case the hardihood of our agricultural labourer is evidenced by the walk of a quarter of a mile with such a serious head injury as the subsequent operation proved to be in existence.

A CASE OF RECOVERY FROM ALBUMINURIC RETINITIS, WITH REMARKS AS TO PROGNOSIS.

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THE following case possesses considerable clinical interest of a twofold character. To the physician it is of great importance in relation to the important question of the prognosis as to the duration of life in albuminuric retinitis, and to the