

found to be shortening to the extent of a quarter of an inch of the left index, middle, and ring fingers. As there was no swelling of the hand, the outline of each dislocated bone was traced along the shaft; and the expanding carpal extremity could be clearly defined. The ligaments connecting the bones laterally could be felt, and appeared to be unbroken. There was no visible deformity in the palm, and the plane of the fingers was not altered.

As very little pain was felt, and there was not much tension of the skin, the dislocation was left unreduced for an hour for the purpose of obtaining corroborative testimony as to the nature of the case. The only doubt entertained was whether the heads of the bones had not been broken off, and the shafts subsequently displaced, as in a Collis' fracture. But upon careful re-examination of the hand it appeared that this could not be the nature of the injury, as the carpal ends of the bones, with the even edges of their articulating processes, could be traced beneath the skin. The dislocated bones were also measured, and found to correspond in length to those of the right hand: there was no mobility to be obtained between them, or crepitus upon attempting to move them.

The dislocation was not reduced without some little trouble, owing partially to the difficulty of grasping and making extension from the carpus. The reduction was accomplished by a rotatory movement of the metacarpus after extension had been employed. The three bones slipped back as one, but without an audible snap, and no crepitus was felt.

With regard to the cause of the luxation, as there were no external marks of violence, except slight grazing of the knuckles, I supposed that having been knocked down by a kick in the chest, which he also sustained, the patient might have fallen upon the hand. He is, however, positive as to the fact of his having been kicked on the back of the hand. He admits he fell, but states that it was upon the right side, and that the left hand did not come into contact with the ground.

One or two points in connexion with the case are worthy of notice. It is remarkable that the three least movable and most firmly articulated bones of the metacarpus should have been thus displaced; and that in so old a subject the brittle bones should have better resisted force than the tough and rigid ligaments. Sir Astley Cooper states, in his work on Dislocations, that he had never seen a case of dislocation of the metacarpus, except in connexion with gun-shot wounds and other severe injuries of the hand. In R. W. Smith's treatise on Dislocations, that of the metacarpus is not mentioned. Mr. Erichsen says that no metacarpal bone, with exception of the first, admits of dislocation. On referring to the catalogue of the museum at the College of Surgeons, I find that there is there a specimen of partial dislocation of the fourth metacarpal bone backwards. It seems to have lost its connexion with the os unciniforme only, being still articulated to the os magnum. I have consulted many other authorities with the view of obtaining further information about this particular dislocation; but as I have been unable to find a single record of such a case as the one which I have described, it is, as far as I know, unique.

July, 1868.

## A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proæmium.

### UNIVERSITY COLLEGE HOSPITAL.

WOUND OF THE POPLITEAL ARTERY FROM SIMPLE  
FRACTURE OF THE FEMUR; AMPUTATION;  
DEATH.

(Under the care of Mr. CHRISTOPHER HEATH.)

THERE would seem to be a general concurrence of surgical opinion as to the best mode of treatment in such a case as the following—a result due, in great part probably, to Mr. Poland's

important paper which was published in the "Guy's Hospital Reports" three years ago.

For the notes of the case we have to thank Mr. Cluff, the house-surgeon.

The patient, a man aged forty-six, was admitted into the hospital on the 4th of August, 1868, with the following history:—Three weeks before the date of his admission, according to his own statement, he was putting on his right boot, and while pulling forcibly at it in order to get it on his foot he felt something give way above the knee. (His right leg had been paralysed a year before—from what cause could not well be ascertained; but he gradually recovered under medical treatment, and, at the time of the accident, had nearly regained the use of the limb.) He was seen almost immediately by a surgeon, who detected a fracture of the femur in its lowest third, and put up the limb at once on the long splint. He suffered a good deal of pain at the time; but still managed to bear the splint for three weeks, during which time it was left undisturbed. On the 3rd of August the pain, which had been growing gradually worse, became wholly intolerable, and the long splint was removed. Next day he was sent to the hospital.

On admission he presented a very blanched appearance; lips, tongue, and eyelids extremely pallid; pulse rapid and feeble. The right leg was enormously swollen throughout, and he complained of intense pain in it—most severe about the knee, but radiating thence up and down the limb. The right knee was unduly prominent, and above it a distinct depression was to be felt. The skin in front and on the inner side of the knee was somewhat reddened. On manipulating the limb, great subcutaneous œdema was found everywhere. On the inner side of the knee deep fluctuation could be doubtfully felt; but he did not complain of *especial* pain on pressure being made in this or any other situation. The right limb felt hotter throughout than the left; and pulsation was distinct in both tibials on the right side. He could move the toes of the injured limb perfectly well. He stated that he had sweated profusely during the previous week, but he had not had any rigors.

The patient was seen by Mr. Heath on the evening of his admission. With the view of ascertaining the character of the fluid which gave the deep fluctuation on the inner side of the knee, Mr. Heath made an exploratory puncture. Nothing came from the puncture but a little blood. The puncture was closed with plaster, a large poultice was applied over the knee, and the ammonia-and-bark mixture and alcoholic stimulants were freely administered.

He passed a restless night, and was seen on the following day by Mr. Erichsen and Mr. Heath in consultation. It was agreed that fluid of some kind lay deeply in the vicinity of the fracture, and with a view to further examination the patient was brought into the operating theatre, and put under chloroform. Mr. Heath then made an incision to the outside of the puncture of the previous evening, so as to admit the forefinger, which, when introduced, readily felt the fractured ends of the bone, and detected around them a large cavity filled mainly with clotted blood. Immediate amputation was resolved on, and the operation was performed by Mr. Heath below the middle of the thigh by a long anterior and a short posterior flap, the sharp end of the fractured bone being removed with the saw.

On examining the amputated limb, a large mass of clotted blood was found lying close to the bone and surrounding the fractured ends. It reached from the middle of the thigh to the bottom of the popliteal space; and at the lower part was a mass of fibrin arranged in lamellæ, which presented at the first view the appearance of an aneurismal sac. No communication was apparent, at first sight, between the mass of effused blood and the popliteal vessels, to which the fibrinous lamellæ just mentioned were closely adherent; but the azygos artery was found torn from the popliteal trunk, the torn end lying in the middle of the effused blood. The little vessel was quite impervious; on cutting it out, it was found impossible to pass a probe through it. On cautiously separating the laminated fibrin from the popliteal vessels, a hole in the artery, passing obliquely through its coats, and large enough to admit a No. 3 catheter, was disclosed. This hole was about opposite the point at which the azygos artery ought to have arisen. The vein was uninjured. The fracture of the bone ran very obliquely from about five inches above the knee to the inner condyle; and the ends of the fragments (especially the lower end of the upper one, which lay in close proximity to the wound in the popliteal vessel) were sharply pointed. There was no evident disease of the bone; it was of normal hardness, and of normal appearance in every way.

The man never fairly rallied from the operation. He suffered from incessant vomiting for thirty-six hours, which obstinately resisted all treatment. He finally sank on the third day.

### WESTMINSTER HOSPITAL.

#### IMPENDING SUFFOCATION FROM DRINKING BOILING LIQUID; LARYNGO-TRACHEOTOMY; RECOVERY.

(Under the care of Mr. FRANCIS MASON.)

THE operation which was performed in this case is one which there is no doubt has often been done unintentionally in the surgeon's endeavour to open the trachea. In the present instance the cricoid cartilage was purposely divided, with the object mentioned by Mr. Mason in his remarks.

A child aged two years was brought to this hospital at 1 P.M. on the 26th of June, 1868, suffering from great difficulty in breathing. His mother said that at 8 A.M. on the day of admission he drank from the spout of a teapot which she had just filled with boiling water. When seen by Mr. Mason, the child had the most distressing dyspnoea, which was becoming more urgent at each inspiration. With the concurrence of his colleague Mr. Brooke, Mr. Mason opened the trachea high up, and cut through the cricoid cartilage. When the tube was introduced, which was readily accomplished, the patient was instantly relieved. In the after-treatment, the tube was taken out at intervals, in order to ascertain if the child could breathe without it; but it was not until the twelfth day that the tube could be wholly dispensed with. The wound in the throat healed rapidly, and the child left the hospital perfectly well on July 24th.

In his clinical observations on this case, Mr. Mason spoke of the carelessness on the part of parents in allowing their children to drink from a teapot or from a kettle—both common occurrences amongst the poorer classes. He said he had purposely opened the windpipe high up. The operation, which was undertaken with the view of affording immediate relief, was simple, and was rapidly completed. He might have performed laryngotomy, and, had he done so, would have made a transverse incision in preference to the vertical one. He, however, thought it prudent in this instance, on account of the extreme youth of the patient, to perform laryngo-tracheotomy. Thus a larger tube could be inserted, which enabled the child to breathe with greater freedom, and there was less chance of its being obstructed by mucus. Mr. Mason ventured to think that many of the difficulties experienced in the operation of tracheotomy arose from the windpipe being opened too low down.

### LONDON HOSPITAL.

#### AMPUTATION OF THE UVULA.

(By Mr. C. F. MAUNDER.)

WITH a view to prevent, in great measure, the painful sensations arising from the passage of a bolus of food across the raw stump of a previously elongated uvula, Mr. Maunders proposes to amputate this organ by the double flap method. These fall together, and their cut surfaces being in contact, no raw surface is exposed to irritation. He recently adopted this plan with a highly satisfactory result, introducing a small suture to maintain coaptation of the flaps.

## Clinical Records

OF

### THE PARIS HOSPITALS.

#### HÔPITAL NECKER.

#### FOUR CASES TENDING TO ILLUSTRATE THE ABSORBING POWER OF THE BLADDER.

(Under the care of Dr. GUYON.)

THE following cases will be found of interest as assisting to elucidate an obscure point of physiological therapeutics which has given rise to much difference of opinion. Not further back than in our number for June 20th, Sir Henry Thompson, in his lecture on Cystitis and Prostatitis, mentions that injections of anodynes into the bladder are of hardly any

value, and that the quantity injected matters little, because the mucous membrane of the bladder appears to have no absorbing power; whilst in a preceding number (Oct. 19th, 1867), Dr. Braxton Hicks, in a lecture on a similar subject, states that he has derived the best results from the employment of injections of morphia. The following clinical observations, and particularly the fourth, would appear to support the latter opinion. We are indebted for both the details of the cases and the remarks which precede and accompany them to Mr. Edward Alling, Dr. Guyon's talented house-surgeon.

There exists a wide difference of opinion between medical men with regard to the absorbing power of the mucous membrane of the bladder. In the number of the *Gazette des Hôpitaux de Paris* for March 7th, 1868, may be read a summary of the results of the more recent French researches upon this subject. These results are highly contradictory. Thus the Messrs. Ségalas, whose experiments were performed upon various animals, fully admit this absorbing power of the bladder. M. Demarquay, whose researches were confined to the morbid human bladder, considers this organ as barely capable of absorbing medicinal substances. MM. Kuss and Susini, on the other hand, absolutely refuse to admit this property. It may be well to say that these experiments were confined to the healthy bladder in man. The practical results derived from the observation of the four following cases would tend to prove that if the absorbing power of the bladder is not great, it does really exist as well in the healthy as in the morbid condition of the organ. The effects of injections with chlorhydrate of morphia were carefully studied as to the light which they might reflect on this point. The injections were made by means of Pravaz's large syringe, and of a small elastic probe *à bout olwaire*, which enables the operator to keep a correct account of the quantity of fluid introduced. Each drop of the solution contained two milligrammes of chlorhydrate of morphia.

CASE 1.—N—, aged forty-five, was admitted into the hospital on Feb. 16th. She had been suffering from cystitis for the last five months, and for six weeks has been unable to maintain the recumbent position for any length of time. She gets little sleep, and consequently has lost flesh, while her features bear the expression of pain. An injection of thirty drops of chlorhydrate of morphia (sixty milligrammes) into the bladder, which was first evacuated. No relief.

Feb. 17th.—Same quantity injected. Slight relief.

18th.—No injection was given in the morning, and the patient complained she suffered more than previously in the afternoon. At five P.M., sixty milligrammes of the same solution were injected. This gave notable relief till near midnight. During the night she passed urine only ten times, whereas before being admitted into the hospital she used to discharge urine forty and fifty times in one night.

21st.—Half an hour after the administration of an injection of thirty drops (same solution) symptoms of narcotism manifested themselves—congestion of the face, drowsiness, incoherent talk. Her neighbours in the ward said that she looked like a "drunken woman." No vomiting. This condition lasted till three o'clock. The same evening thirty drops were again injected, but with no fresh symptoms of narcotism.

22nd.—Thirty drops injected in the morning, but the evening injection was withheld. The next morning she complained of this, saying that she had had no sleep the whole night, and had suffered intense pain.

23rd.—Three injections of thirty drops each were administered, with considerable relief to the patient. From this time to the 30th of April the injections were continued, with the same favourable results as above mentioned; but the disease was then complicated by inflammation of the right kidney, and the treatment was suspended.

CASE 2.—M—, aged thirty-one, was admitted into the hospital on Feb. 19th. Has been suffering from cystitis for ten months. Thirty drops of the solution were first injected, and the very next day there was much relief.

Feb. 22nd.—Injection of twenty-five drops twice in the day.

23rd (fourth day after admission).—The patient asserted that for six months he has never experienced the relief which he now feels after the injections of morphia.

25th.—Injections suspended.

26th.—The patient said he had suffered considerable pain during the night. The injections were resumed; and the introduction of thirty drops of the solution into the bladder gave immediate relief.

From Feb. 28th to March 4th twenty drops only were injected every morning, with no increase of pain.