PROVINCIAL MEDICAL & SURGICAL JOURNAL.

REPORT OF SURGICAL CASES OCCURRING IN THE CHELTENHAM HOSPITAL, FROM 1830 to 1840.

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Dispensary Department of the Hospital.

The Institution in which the following cases occurred, consisted of a Dispensary to which a Casualty Hospital was attached, for the reception of accidents and cases for surgical operation, and occasionally urgent cases, both Medical and Surgical, were admitted, the nature of which prevented their being properly treated at their own houses.

In the year 1839 the establishment was converted into a General Hospital and Dispensary. The Medical Staff at present consists of two physicians and two surgeons for the Hospital, and three surgeons and three physicians for the Dispensary, and a house surgeon and apothecary.

The cases were, for the most part, witnessed by myself during the time I was a pupil, and since I have settled in the town, many were treated by myself, under the direction of the surgeons of the establishment, to whom I gladly avail myself of an opportunity of publicly acknowledging many personal acts of kindness, both in professional and private life.

PRIMARY AMPUTATIONS.

	Cases.	Cured.	Died.
Arm	3 .	3 .	0
Fore-arm . .	2 .	2 .	0
Shoulder joint	1 .	1 .	0
Thigh	6 .	4 .	2
	12	10	2

SECONDARY AMPUTATIONS.

Arm	1 .	1 .	0
Fore-arm . .	0 .	0 .	0
Shoulder joint	1 .	0 .	1
Thigh	6 .	5 .	1
Leg	7 .	7 .	0
	15	13	2

I shall first notice the cases of amputation, 27 in number, of which 12 were primary, i.e., performed within twenty-four hours after the receipt of the injury, and 15 were secondary. Of the primary, two, and of the secondary, also, two were attended by a fatal result. In the two first mentioned, the operation was performed for severe compound fractures of the leg. In the one instance, the fracture was compli-

cated with a wound of the knee joint, and with laceration of the popliteal artery. The man was found lying in the road immersed in snow, and was admitted in an almost dying state; reaction ensued in a few hours, and the hæmorrhage returned; the thigh was amputated, and very little bleeding took place during the operation, but the patient died soon after he was removed from the table, from the combined effects of loss of blood and shock to the nervous system. In the second instance, the limb was crushed by a heavy load of earth falling on it; the patient, a labourer on the Gloucester and Birmingham railroad, was admitted in a very exhausted state; amputation of the thigh was performed, but he died fourteen hours after the operation.

In one of the successful cases the operation was done under very unfavourable circumstances; the nature of the injury was very severe, viz., compound fracture of the thigh, with laceration of the knee joint, and popliteal artery. The limb was removed very high up; secondary hæmorrhage followed, but the man eventually did well. (See case.)

The operation at the shoulder joint was performed for a very severe compound fracture of the whole limb, occasioned by a heavy load of stone falling on it. (See case.)

With regard to the secondary amputations, the parts removed are mentioned in the accompanying table. The limb in the first case was removed near the shoulder joint, for fungus hæmatodes. The subject was a lad, aged 18; the operation was successful; but he eventually died of pectoral disease, the exact nature of which was not ascertained.

The case in which the arm was removed at the shoulder joint was one of a very formidable character. The unfortunate patient was admitted from the railroad works, having sustained some very severe injuries; among which was a very bad compound fracture of the humerus, which, at first, promised to prove directly fatal. Contrary to all expectation he rallied, and in consultation it was determined to give him the chance of the operation; this was done three days after his admission; it terminated unsuccessfully twenty hours afterwards. Dissection discovered extensive internal injury.

The operations above the knee were performed

for disease of the knee joint, with one exception, which was for abscess of the tibia. (Spina ventosa of the old authors: see case.) The ages of the patients were 10, 59, 29, 52, 15, 14; of these cases one proved fatal.

The limb was removed below the knee in seven instances; in three, for long standing ulceration of the leg, accompanied with disease of the bone; in one for scrofulous disease of the tarsus; in one for an old accident, compound dislocation and fracture at the ankle joint; in one for gangrene, the result of cold; in one for traumatic gangrene. In the last case the operation was performed when the gangrene was spreading. (See case.) All were successful.

The circular method was adopted, excepting in five instances—namely, in the two cases at the shoulder joint, and in three in which the limbs were

removed above the knee, where the lateral double flap was substituted. Secondary hæmorrhage took place in seven instances. In one it proceeded from the medullary cavity of the femur, and was arrested with difficulty. The femoral vein was tied in two instances, and in one of the amputations below the knee four veins were secured by ligature, without any bad consequences ensuing.

The time occupied in healing the stumps was from three to six weeks, excepting in two instances, in which took a much longer time.

It was in the early cases that secondary hæmorrhage occurred. In these the stump was usually dressed before the patient was removed from the operating table. Subsequently a different mode was adopted with the best results: this consisted in leaving the stump lightly covered some hours after the operation.

No.	Name.	Age.	Case.	Part removed.	Result.
1	Charles Lineham	10	Disease of the knee	Thigh	Cured
2	William Tinder	46	Compound fracture	Arm	Cured
3	Mary Page	44	Disease of the leg	Leg	Cured
4	Maria Arnott	59	Abscess of tibia	Thigh	Cured
5	Robert Gibbs	43	Compound fracture } and necrosis	Leg	Cured
6	John Charley	18	Gun-shot wound	Arm	Cured
7	Maria Gingle	36	Ulcer, &c.	Leg	Cured
8	Anthony Mustoe	45	Necrosis	Leg	Cured
9	Ann Pash	22	Disease of tarsus	Leg	Cured
10	John Harris	23	Gun-shot wound	Forearm	Cured
11	Ann Page	52	Disease of the knee	Thigh	Cured
12	Charles Barton	9	Disease of the knee	Thigh	Cured
13	Harriet Woolford	22	Gangrene	Thigh	Cured
14	George Tady	18	Fungus hæmatodes	Arm	Cured
15	Ann Bullock	55	Gun-shot wound	Arm	Cured
16	Charlotte Morgan	15	Disease of the knee	Thigh	Cured
17	Thomas Dyer	10	Compound fracture	Forearm	Cured
18	Richard Greening	14	Disease of the knee	Thigh	Cured
19	Frederick Teale	20	Compound fracture	Thigh	Cured
20	James Tanner	36	Compound fracture	Thigh	Cured
21	Thomas Turner	29	Disease of the knee	Thigh	Died
22	William Field	25	Lacerated wounds } followed by traumatic gangrene	Leg	Cured
23	William Hawker	50	Compound fracture	Thigh	Died
24	George Cooke	12	Compound fracture	Shoulder joint	Cured
25	Job Humphris	29	Compound fracture	Thigh	Died
26	Thomas Leary	24	Compound fracture	Shoulder joint	Died
27	William Browning	20	Compound fracture	Thigh	Cured

It appears from the above statement, that of twenty-seven capital amputations, four only terminated fatally. I am quite aware of the absurdity of drawing conclusions from a small number of cases, and I am sorry to add, that if my report extended over a space of fifteen instead of ten years, the average amount of success would be materially diminished. Dr. Peacock, in the second series of statistical tables of the Edinburgh Royal Infirmary, writes thus:—"The striking fallacy of deductions as to the mortality of operations, founded on a short period of observation, is well shown by the comparison of the last two tables with those given in a preceding report, for it appears, that of sixteen amputations performed during the last nine months, eleven were cured and five died; whereas, out of

seventy-two cases, the number which occurred during four years, thirty-seven were cured and thirty-five died.*

The two cases of injury of the abdomen were both of a severe character, presenting well-marked symptoms of rupture of a viscus, accompanied by internal hæmorrhage. One recovered after several days' of intense suffering, constant vomiting, and other signs indicating a speedy dissolution. The treatment consisted in giving brandy and ammonia, to sustain the powers of life.

The other case proved fatal. The patient, a man, the subject of scrotal hernia, was struck by a skittle ball on the hernial tumour. Symptoms of intense peritonitis took place, and he died thirty six hours

* *Provincial Medical and Surgical Journal*, Sep. 2, 1843.

after the accident. A post-mortem examination discovered a rent in the ileum, and extravasation of blood into the abdominal cavity. There was only one kidney, which was of a horse-shoe shape.

The case of aneurism was one of peculiar interest and of rare occurrence. The man was thirty years of age, the aneurismal tumours were situated on the left side of the body, one about four inches below Poupart's ligament, the other in the popliteal space. The external iliac artery was tied. The patient lived a month, and died of gangrene of the limb. (See case)

The cases of burn were mostly of a formidable nature, death usually occurred within a few days of the accident, in others the patient dragged on a miserable existence, and eventually fell a victim to profuse suppuration; others recovered. The plan of treatment consisted in the use of the linimentum calcis and linseed oil, and spirits of turpentine, sedatives and diffusible stimuli being administered. After the sloughs had separated, the wounds were treated according to the established rules of surgery, and the constitution supported by a liberal diet, wine and malt liquor.

The cases of cataract, six in number, of which two were congenital, were operated on by the needle, four with complete success; the remaining two, in which the operation produced no relief, were complicated cases, and afforded very little prospect of success, the patients being advanced in years. One eye was operated on, at a sitting, and a rigid antiphlogistic plan of treatment adopted, previous to and after the operation. If the lens was not completely depressed, the operation was repeated in a few days. No alarming inflammatory action followed in any instance, which I attribute to the preparatory measures used to ensure success.

In one case the lens, partially absorbed, made its appearance in the anterior chamber at the expiration of two years. A section of the cornea was made with a view to its extraction, but owing to some accident (the difficulty of fixing the eye) it receded into the posterior chamber, where it remained out of the axis of vision. The wound of the cornea healed kindly, and the patient did well.

In the cases of cancer of the lip, the lower lip was universally affected. The subjects had all been addicted to smoking pipes. The complete excision of the parts was practised in preference to Dupuytren's operation, excepting in two instances, which the latter mode was preferred, in consequence of the extent of the disease.

Of the diseased joints, little requires to be said. They were, for the most part, cases of chronic inflammation of the synovial membrane. The cases of dislocation were few, although a great number actually occurred among the out-patients, to notice which would be foreign to my present purpose. The shoulder was luxated in five instances; the head of the bone was thrown into the axilla in three instances, and in two, under the pectoral

muscle. With one exception the bone was easily replaced. This difficulty arose in one of the cases forwards, in which long and continued extension with the pulleys was resorted to. One case of dislocation of the hip was admitted. The patient was a woman, aged 65; the head of the femur was found resting on the dorsum ilii. (See case.)

One case of dislocation of the clavicle at the scapular end was witnessed. Considerable deformity accompanied the accident, but the patient, a sergeant in the army, perfectly recovered the use of the arm, the shoulder being a trifle higher than the other.

Of the cases of dislocation of the ankle, three were lateral, and one forwards; all were accompanied by the fracture of the fibula. The case of dislocation of the wrist I did not see. That of the elbow was admitted on account of the injury to the soft parts: it did well with all its usual symptoms. Excision of the elbow joint was performed in one instance, and with complete success.

Local bleeding, counter-irritation by blisters, liniments, moxas and issues, compression by plaster and bandage, was the plan of treatment adopted; and I am compelled to add, in too many instances, with indifferent success.

Of the two cases of disease of the bladder and the prostate gland, little need be said. They were both in old subjects, and were admitted more for the convenience of the surgeons than with a view to ultimate relief.

The injuries of the eye were from lime, and as they were seen immediately after the accident, by cleansing, and an active antiphlogistic plan of treatment, the organs were ultimately saved. One case of penetrating wound of the eye ball occurred. The sight was lost owing to the escape of the lens.

The two cases of erysipelas were the result of accident. One recovered. Both being phlegmonous, incisions were resorted to; the hæmorrhage in one case, where the leg was the part affected, was very profuse, the soft parts became gangrenous, and the patient died.

Of the cases of fistula in ano, two were the result of accident, the remaining five were symptomatic of disease of the lungs and abdominal viscera. In three the sinus did not heal after the operation; two ultimately died of phthisis; in fact in two only could the operation be said to have been successful.

The straight position was usually preferred in the treatment of fracture of the legs. The limb was generally placed in a fracture box. The splints were seldom removed till five weeks had elapsed.

The fractures of the thigh were placed on an inclined plane, excepting in a few instances, where Desault's method was used. The limbs were not disturbed before the sixth or eighth week after the accident, and in no instance do I remember that union was not perfectly accomplished. I have lately seen several instances of ununited fracture

of the thigh, and in nearly every case I attribute the failure to two causes, viz., the too short time allowed for union, and the too frequent examination of the limb.

I have preserved notes of five cases of fracture of the leg, in which union did not take place in the usual period; in three, active bleeding was called for, on account of some complication of disease, or other injury received at the time of the accident; in one, severe hæmoptysis took place, which was treated by active venesection, but was not arrested till a large quantity of blood had been abstracted. In five weeks the tibia was found to be very imperfectly united; in ten, from the date of the accident, he was made an out-patient, but several months elapsed before he recovered. In three cases there appeared no appreciable reason why the bones should not have united. In these a tourniquet was placed over the seat of the fracture and tightened, daily pressure being maintained as long as the patient could bear it; the limbs were placed in splints, and suitable diet, &c., ordered. In one, ten weeks, in a second, fourteen, and in the third case, sixteen weeks elapsed before a cure was completed. One case, which was accompanied by œdema of the whole limb, was treated by the immovable apparatus, as recommended and practised by my friend, Mr. John Lawrence, of Brighton, who was house surgeon at St. Bartholomew's Hospital. The first effect of the equal pressure was to reduce the swelling, which of course rendered the apparatus quite loose; it was re-applied, and the patient, a railway labourer, was allowed to move about on crutches in the open air. By this plan, which I have repeated with equal success, the bones quickly united. I have often observed that the air of and confinement in a hospital often exerts a baneful influence on patients, whose occupation is in the open air, and it has occurred to me that the want of power necessary to the union of fractured bones might be in some way obviated in cases of simple fracture, by adopting Mr. Lawrence's mode of treatment, which is to confine the patient to bed sufficiently long to remove the first effects of the accident.

Several cases of severe compound fracture were admitted. In three, more than an inch of the tibia was removed by the saw. Although these eventually did well, the cure was very tedious. In robust and phlethoric subjects, as soon as reaction took place, general bleeding was employed, and other means, calculated to reduce the force of the circulation, had recourse to. Poultices and other relaxing applications were directed as soon as suppuration was established, but were omitted as soon as circumstances permitted. One case, remarkable for the quickness of the cure, occurred in the person of a woman, between the seventh and eighth month of pregnancy. The limb was carefully dressed, and the compound fracture was cured in six weeks: at the end of which time delivery was accomplished.

(See case.) This is another of the many proofs that the reparative powers of nature are not so feeble as many imagine, during pregnancy.

Another case of a most dangerous character was admitted in the person of a man of very intemperate habits, who had sustained a simple fracture of each thigh, and a compound fracture of the leg. This man was attacked with traumatic delirium, from which he perfectly recovered, with useful limbs.

In one case of fracture of the pelvis, the bladder was ruptured at its fundus. The patient lived five days. On examining the body after death, it was found that the efforts of nature to prevent extravasation of urine in the abdominal cavity were complete, five adhesions were found between the bladder and parietes of the abdomen. This was assisted by the use of the catheter, which was fastened in the bladder.

One case of fracture of the spinal column took place, in which the patient lived three days. The symptoms were quite plain, the bodies and spinous processes of the fifth and sixth cervical vertebrae were found fractured.

In the cases of hare-lip, sutures were used instead of the silver pins. All did well.

Of the cases of hydrocele, seven were in adults, and one in a young subject. In the latter, simple incision was successfully practised; in the former, the usual operation by injection was performed. The fluid used was a solution of one drachm of sulphate of zinc in a pint of water. In one instance the testicle was situated in front of the tumour; in another, where the swelling was of an immense size, and contained nearly four pints of fluid, the operation failed. At the expiration of three weeks from the first tapping the trocar was introduced, and the same quantity of fluid evacuated, but differing materially in quality, being mixed with blood. The tunica vaginalis was found to be divided into several compartments, which I have no doubt was the result of partial and an insufficient amount of inflammation having been induced by the previous operation. These adhesions were broken down by introducing a probe through the canula, in order to evacuate the fluid. The swelling quickly acquired its usual size; the man was desired to rub in the ointment of hydriodate of potass, and to take twenty minims of tincture of iodine three times a day. A perfect cure was effected in three months. It is rather remarkable that no pain followed either operation.

The cases of strangulated hernia which came under notice were three femoral and six inguinal. The former occurred in females above the middle age. One was reduced, the others were operated on with success. The cases of inguinal hernia were in men. Two were reduced by the agency of bleeding and the warm bath; in one the tobacco enema was used, but produced the most alarming depression of the vital powers. The rupture went up when

he was placed on the operating table, which was a fortunate termination, as I think he would have sunk under it. Nothing calling for a particular notice occurred in the progress of these cases; one patient, an old soldier, who had been severely wounded in the Peninsular war, came under my care, for extravasation of urine, about two years after the operation, and I found it had been followed by a radical cure, an event which I think will be found to take place oftener than is generally believed.

The after-treatment consisted in adopting means calculated to prevent or reduce inflammatory action. The early administration of purgatives was avoided, a line of practice, which, I am glad to find, is becoming more and more general, for I think nothing can be more irrational than to exhibit medicines, immediately after a severe operation, calculated to disturb organs already rendered highly irritable, by having been constricted. In many instances I have seen a full dose of opium produce the happiest results by tranquillizing the nervous system, which has been followed by a full evacuation from the bowels, in a few hours. In other cases, where the early use of purgatives has been resorted to, the irritation of the alimentary canal has been converted into a fatal inflammation, accompanied by obstinate constipation. In the case which terminated fatally, the strangulation had existed many days; sphacelus of the bowels had taken place.

Among the many interesting cases of injury of the head which were admitted, the symptoms usually attendant on concussion of the brain, were present in some; in others the symptoms were so diversified that it would be difficult, if not impossible, to class them under the head of compression or concussion. In one case symptoms of general excitement of the brain were observed. The patient, a boy, about twelve years of age, was brought to the hospital, having received a violent blow on the summit of the head; he fell insensible, but in a few minutes he recovered from the immediate effects of the accident, when he became violent and unmanageable, swearing loudly, &c.; four men were required to restrain him. A vein was opened in the arm, and ten ounces of blood were abstracted with benefit; cold was sedulously applied to the head, active purgatives administered, and he recovered in a few days.

In another case, which was complicated with compound fracture of the jaw and forearm, fracture of the ilium, and an extensive scalp wound, the patient made the most wonderful recovery I ever witnessed. The powers of the brain were greatly enfeebled; nevertheless, he so far recovered that he was able to follow his employment.

The treatment of these cases varied according to circumstances. In many, stimulants were administered with advantage, and after reaction had ensued, general and local bleeding were adopted,

together with full doses of calomel and croton oil. Blisters and setons were occasionally employed.

Two cases of compound fracture of the skull were treated successfully. These were both in young subjects. In one, portions of the temporal and parietal bones were depressed, but as the symptoms did not call for the use of the elevator, general antiphlogistic treatment was adopted. In the second case the parietal bone was extensively fissured; the symptoms demanded active depletion. Under this plan both boys recovered.

Three cases of fractured ribs, accompanied with extensive emphysema, were admitted. Of these, two proved fatal, and one recovered. In the case which terminated prosperously, scarifications were freely made in the situations in which the accumulation of air occurred. No pressure was made by means of a bandage till several days after the accident.

The case of molluscum is related by Mr. Charles Fowler, in the seventh volume of the Transactions of the Provincial Medical and Surgical Association.

The case of noli me tangere was a very bad one, and resisted every plan of treatment.

Two cases of gonorrhœal ophthalmia were admitted; in each only one eye was affected. In one, the eye was saved under the combined effects of depletion and the application of nitrate of silver. The second case was not seen till the disease had existed six days. The eye was lost.

Only one case of stone in the bladder was witnessed. In this the operation of lithotomy was performed. (See case.) This locality appears to be very free from this disease. During fourteen years I have only seen and heard of four cases in this town or neighbourhood.

Among the cases of tumour, there was one removed by the late Mr. Averill, from the neck. The dissection was a most difficult one; the disease returned, and destroyed the patient.

The remaining cases do not demand any particular observations, as they did not possess any points of interest that I am aware of.

TABLE OF CASES.

Abscess	6
„ Lumbar	1
Amaurosis	1
Abdomen, injury of	2
Aneurism, femoral and popliteal	1
Burns	32
Cataract	6
Cancer of the lip	6
„ breast	1
„ uterus	1
„ chimney sweeper's	2
Contusions	145
Contraction of neck	2
Diseases of the joints	41
„ spine	4
„ finger; osteosarcoma	1
„ bladder, &c.	2

Dislocation of the shoulder	3
" hip	4
" clavicle	1
" ankle	4
" wrist	1
" elbow	1
Eye, injury of	4
Eye-ball, wound of	1
Erysipelas	2
Fistula in ano	7
Fracture of the cranium	4
" spine	1
" scapula	3
" clavicle	8
" ribs	12
" ribs and clavicle	1
" ribs and leg	2
" ribs, and emphysema	2
" jaw	3
" pelvis	3
" thigh	30
" thigh and arm	1
" thigh & dislocation of hip	1
" both thighs, compound } fracture of the leg, } delirium tremens	1
" thigh and leg	1
Fracture of the leg	54
" arm	17
" patella	1
" fore-arm	12
" elbow joint	5
" leg, and concussion	1
" compound of fore-arm	4
" compound of thigh & leg	2
" leg, with partial dislocation	4
" compound of leg	13
" compound of arm, leg, } and jaw, &c. . . .	1
Hydrocele	8
Hare-lip	6
Hernia, strangulated	9
Hæmorrhoids	1
Injury of the head	34
" chest	3
" hand	7
" perineum	1
Mortification of the toes	1
Molluscum	1
Noli me tangere	1
Necrosis	3
Ophthalmia, gonorrhœal	2
" strumous	3
" acute	5
Phymosis	4
Polypus of the nose	1
" uterus	1
Prolapsus uteri	1
Sprains	13
Stricture of the urethra	7
" rectum	2
Syphilis	8
Scald	2
Stone	1
Spine, injury of	1
Tumours	10

Tonsils, enlarged	2
Testicle, inflamed	3
Throat, wound of	1
Tetanus	1
Tendon, injury of	2
Ulcer of leg	8
Ulcer of cornea	1
Urine, extravasation of	1
Uterus, disease of	1
Urine, retention of	1
Wounds, contused	17
" incised	13
" lacerated	11
" gunshot	5
" knee joint	2
" ankle joint	2
Warts	2
Various	128

803

The number of deaths was 57.

(To be concluded in our next.)

MEMOIR OF DR. BARLOW.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

Although you have announced, in a former number, the loss which the Provincial Medical Association has sustained, in common with the profession, and the public at large, by the lamented death of Dr. Barlow, of Bath; yet I am induced to request your insertion of the following brief account of his professional career, with a list of his works, as far as I am acquainted with them, in the belief that every thing relating to our distinguished and esteemed associate will be interesting to those members who enjoyed his friendship, and had the pleasure of meeting him at our anniversaries; every one of which he attended from the first formation of the Association at Worcester, in 1832, to our last assembly at Leeds, in 1843.

Edward Barlow was born at Mullingar, county of Meath, Ireland, on the 25th of June, 1779. His father was a distinguished practitioner at that place, and died August 9, 1825, at the advanced age of 81. The Westmeath Journal, in announcing his death, stated that "he was for fifty-six years surgeon to the County Infirmary, and for the greater part of that period, until years and infirmity limited his exertions, in possession of the almost undivided medical practice of the surrounding country—a sure proof of the zeal and ability with which he exercised the arduous duties of his professional calling."

Dr. Barlow commenced his professional education under the guidance and direction of his father, who, from an early period, intended to bring up his son to the medical profession, in the expectation that he would succeed to his private practice, and public appointment at the Infirmary. In furtherance of these objects, and to enable him to become a Licentiate of the Dublin College of Surgeons, he was bound apprentice to his father, and after the expiration of his apprenticeship, attended the various lectures and hospitals in Dublin, Edinburgh, and London; at the latter place he was a pupil of Clive and Cooper, at the