

climate of the Upper Engadine. One such case, of extreme severity, will be remembered by many who were in St. Moritz in the season of 1870. This gentleman had to be conveyed home the whole of the way from St. Moritz to London on his back! Other cases I have seen of the same kind, who escaping in time from the unfavourable influence of this watering-place, have obtained immediate relief from the severity of their symptoms on removal to a warmer neighbourhood. I recommended a patient, in the season of 1871, whose neuralgic pains were becoming daily more and more severe, to remove at once to Ragatz, but his symptoms were so greatly mitigated by the time he reached Thusis, only six hours from St. Moritz, that he was content to remain there. I presume no one would think of sending cases of chronic renal disease to the Engadine, but I have seen one case in St. Moritz of slight albuminuria continuing after scarlet fever, in a young lady, who certainly did well there. The season (1871) was a remarkably fine and warm one. The albumen, however, did not permanently disappear, and I should not recommend a repetition of the experiment, as I believe a cold season, like that of 1870 or 1872, might make matters worse.

But I must interrupt my catalogue of cases which are unsuited to the climate of the Engadine, lest I should be accused of a desire to "curse it altogether," whereas, on the contrary, I have the very highest opinion of its usefulness in a great many cases, as I have shown in my book on this subject. There is an increasing tendency to bring St. Moritz into favour as a "ladies' bath" (!) and uterine cases, real and unreal, abound there.

If I mistake not, the spring of St. Moritz will be regarded with peculiar veneration and often visited by disconsolate wives and unsatisfied matrons. Hitherto the saint has shown himself by no means inexorable; and I expect to hear of substantial acknowledgments of his beneficent interference, in the usual form of stained glass windows in the English church, with an authentic effigy of the saint himself, turning his toes out in a becoming saintly manner, and drinking a glass of his own invigorating spring! It is not, indeed, remarkable that rest from unwholesome excitement, the advantage of regular exercise in pure bracing air, and the adoption for a time of simple habits of life, should be attended with a renewed nutritive and functional activity in the uterine as well as in the other organic functions. This, and nothing more mysterious, is doubtless the true account of the influence of a residence at St. Moritz in that particular direction.

(To be concluded.)

A Mirror

OF

HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

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. Proœmium.

ST. GEORGE'S HOSPITAL.

MIXED TUMOUR OF THE FEMUR; AMPUTATION AT HIP-JOINT; SECONDARY DEPOSITS IN LUNGS; DEATH.

(Under the care of Mr. POLLOCK.)

We reported at page 696 a case of successful amputation through the hip-joint, by Mr. Pollock; but the case the notes of which are subjoined was fatal from the secondary deposits in the lungs. The notes, taken by the clinical clerk, Mr. Frost, are supplied by Mr. Cresswell Baker, house-surgeon.

J. W.—, aged twenty-one, was admitted on Dec. 20th, 1872, with a painful swelling in the left thigh, which had existed for two weeks. The tumour was slightly elastic, situated at the lower end of the femur, and evidently connected with bone; it extended across the front of the thigh, side to side. Circumference, $15\frac{1}{2}$ inches; measurement in the same position in opposite limb, $12\frac{3}{4}$ inches. Numerous ecchymatous pustules existed on the left leg.

Ordered ten grains of iodide of potassium three times a day; and diluted nitrate-of-mercury ointment (1 to 6) to be applied to the sores.

Dec. 28th.—The knee-joint is becoming stiffer; swelling not increased; ecchyma still remains.

Jan. 13th, 1873.—Circumference of limb is now $16\frac{1}{2}$ in.

16th.—At 1 p.m. amputation through the hip-joint was performed by antero-posterior flaps, after the patient had been put under the influence of ether. Silk ligatures were used for securing the vessels, and a continuous silk suture for bringing the lips of the wound together. Wound dressed with carbolic lotion.

18th.—The sutures were removed from the central portion of the wound.

The patient continued to progress well till the 25th of January, when he experienced severe throbbing pain in the stump, and suffered from profuse sweating. Sutures removed from the whole extent of the wound, which has closed.

28th.—One of the ligatures came away to-day. A sore has formed over the sacrum. Water-bed ordered.

29th.—More ligatures came away. Bowels have been very irregular in action since the operation. Ordered an enema.

On the first four days of February many ligatures came away, that from the femoral separating on the 2nd. About that time patient had a troublesome cough, for which he took medicine for some time. Moist sounds heard in the chest. Respiration 46.

Feb. 9th.—The stump has not done well for the last three days. Granulations pale and flabby. The last ligature removed.

13th.—Chest symptoms much worse. From this time he gradually got worse, and died at 10.30 p.m. on the 14th. The temperature, which was 101° F. before the operation, never exceeded $102^{\circ} 6'$. A hypodermic injection of one-third of a grain of morphia was given every morning, and generally in the evening. The tumour was examined microscopically by Mr. Haward, who reported that it was of a mixed character, consisting in some parts of cartilage, and in others of the round and oval celled sarcoma, with here and there an increase of the intercellular substance and sparsely scattered cartilage cells.

Post-mortem examination sixteen hours after death.—The wound was healed with the exception of two sinuses, which led up to a small suppurating cavity at the outer side of the acetabulum, which was itself healthy. There were pleural adhesions on both sides, and a small quantity of fluid in the left pleural cavity. Attached to the visceral pleura, and projecting into the pleural cavity on each side, were numerous tumours, mostly of a round or ovoid shape, and varying in size from a pea to a hen's egg. These were firm and elastic, and to the naked eye presented very much the appearance of cartilage. Under the microscope they were seen to consist chiefly of round and oval cells, which, in some parts, were elongated and fusiform. An examination of many sections discovered, in a few, portions in which there was an increase of the intercellular substance imbedded in which were a few ill-formed cartilage cells. Throughout both lungs were numerous growths of a similar character. To the pericardium were attached several similar growths. Heart, liver, and spleen were natural; the kidneys were congested.

HIGHGATE INFIRMARY.

A CASE OF GLOSSO-LARYNGEAL PARALYSIS (RETRO-GRESSIVE); WITH REMARKS.

(Under the care of Dr. THOS. STRETCH DOWSE.)

THIS case is of a nature not often met with, and, because the tongue and larynx are the principal parts involved, comes under the designation of glosso-laryngeal paralysis. The disease at its onset is characterised by difficulty in the pronunciation of certain letters, as well as by diminution of motor power in the facial, lingual, and laryngo-pharyngeal muscles. The voice becomes implicated, and the laryngeal sounds, instead of passing through the mouth and becoming perfected by the motion of the lips, make their way through the nose, producing a nasal resonance. The acts of deglutition are first difficult, then impossible. The patient in

this case exhibits in an extremely marked degree the signs and symptoms just enumerated. He presented himself for admission at the Highgate Hospital on the 10th of January last with the following history:—

Twenty-eight years of age; no signs or traces of syphilis; has always been a steady, even-tempered man, and up to the age of sixteen had good health. At this time he fell from a tree. Precise information cannot be gained of his state after the fall. It appears that he had hæmorrhage from the nose, mouth, and ears. This, if true, would lead one to the conclusion that the base of the skull was fractured. He was taken to the Royal Free Hospital, Gray's-inn-road, where he ultimately recovered under the care of Mr. de Méric. When twenty years of age he enlisted as a soldier, and was sent to Canada, where he had a sunstroke. He was then discharged from the army, and returned to England. His health was quite good in every way until eighteen months ago, when he was brought home in the middle of a very hot day in a fit, and was insensible for an hour. His wife says that when consciousness returned he stuttered, and had difficulty in bringing out his words for a month or more. Since that time he has not followed any occupation; and although his intellect remained clear, he seemed stupid and dull, and frequently complained of pain in the back of the head. On the 6th of January last he was seized with another fit, but did not entirely lose consciousness; and upon coming to himself it was found that his left arm was completely paralysed, and the jaw locked, so that he was unable to get food between the teeth or utter a sound. He was in this state when first seen.

The lower jaw could not be depressed for more than half an inch; the tongue was immovable; saliva was dribbling from the mouth, and there was considerable paralysis of the muscles of each forearm, with deficiency of grasping and co-ordinating power, more marked, however, in the left than in the right. He walked slowly, but did not stagger or appear giddy. There was a calm and slightly idiotic expression of countenance, and upon examining the head a deep furrow of depressed bone was found in the direction of the left parieto-lambdoidal suture. When restrained to be fed by means of the stomach-pump, he sometimes got excited and became rather violent, but this state was only momentary, and passed off with the cause. After he had been in the hospital about a week, the use of the stomach-pump was discontinued, and fluid nutriment was passed into the stomach through the nose by means of india-rubber tubing. Upon more than one occasion he was found partially unconscious, in a state almost amounting to asphyxia, which arose from the pressure of a bolus of food upon the epiglottis. When in this condition the sphincters were relaxed, and fæces and urine passed involuntarily. Notwithstanding this, there was at times a doubt as to the extent of voluntary power which he possessed over the paralysed parts. One day, when the tube of the stomach-pump was being introduced, some difficulty was experienced when it came to the pharynx, and one of the attendants gave him pain by pressing too hard upon his leg. This drew his attention away, and not only did the tube at once pass easily, but his jaw dropped fully. The parts paralysed, the amount of palsy, and the manner in which these conditions present themselves, will be best considered in the following order.

First, then, with regard to facial expression. It cannot be said that this case presents marked labial paralysis over that of several other muscles of expression. There is considerable paralysis, however, about the orbicularis oris, which prevents him from bringing the lips together, as in whistling, pronouncing some of the vowels, or expiring a column of air; and, from the lips being at all times slightly apart, there is constant dribbling of saliva from the mouth. When made to laugh, as a rule, those muscles which draw up the angles of the mouth—the zygomatici and risorii—usually act inco-ordinately, giving one at first sight the impression that the muscles on one side of the face are considerably more palsied than on the other. This is true in a measure, and presents a point of interest. Invariably when this act is performed, the left angle of the mouth is drawn up before the right. The lower jaw is partially depressed, and the patient has no voluntary power to extend it beyond a given point; yet when he performs an extra inspiratory effort, as that associated with yawning, when the shoulders are raised and the chest and head become

fixed, the depressors of the lower jaw—namely, the digastric, the stylo-hyoid, and the genio-hyoid—appear to come into play; the hyoid bone becomes elevated, and the jaw drops, and returns to its former position by an apparently natural and voluntary effort. This appears to be the chief complication which makes this case to differ from other recorded cases of glosso-laryngeal paralysis. The tongue is almost motionless. When asked to protrude it, he can at times (this is not invariably the case) move it just over the edge of the lower row of teeth, and when drawn out forcibly by a pair of forceps, it is smartly retracted, showing that the genio-hyo-glossus muscle is not so much palsied as the hyoglossi and linguales, as he is totally unable to render it concave, or move it from side to side.

The nutrition and sensation of the mucous surface of the tongue does not appear to be interfered with. There was some difficulty in examining carefully the velum and pillars of the fauces, and the interior of the larynx, from his not being able to depress the lower jaw sufficiently. After as exact an observation as possible, the isthmus faucium, including the palato-glossi, palato-pharyngei, uvula, as well as the levatores and tensores palati, seemed almost devoid of tactile sensibility. On stimulating these parts by means of a quill, the muscles did not respond, the uvula and velum pendulum palati remaining in their flaccid condition, and there was no reflex movement of the middle and inferior constrictors to produce the feeling of nausea which invariably accompanies this act; but directly the posterior wall of the superior constrictor muscle was touched it gave him pain. Trousseau says that in these cases sensibility is everywhere normal, and that irritation of the mucous membrane of the soft palate produces motion of the velum by reflex action.

The patient is almost devoid of masticating power, not so much from absolute inability to raise and depress the lower jaw as from the absence of alternation of lateral movements which are influenced by the external pterygoid muscles. He has scarcely any power to execute the first or second stages of the act of deglutition. This is readily accounted for by the almost perfect immobility of the tongue. It cannot be pressed upward against the hard palate, and its base cannot be retracted at the same time that the larynx and pharynx are raised. The epiglottis, which in the second stage would naturally fall upon and close the upper aperture of the larynx, remains partially inactive, and does not allow the food to pass over it to be grasped by the pharyngeal constrictor. Hence arises the condition of partial asphyxia, from which he has not unfrequently suffered. The method he adopts to take solid food is this: he crams the mouth until it can hold no more, and after the mass of food has become softened by the saliva he pushes it with his finger through the isthmus of the fauces over the epiglottis, where it falls by gravitation into the grasp of the inferior constrictor of the pharynx. When once here this muscle acts to propel it onward. From this it was concluded that the inferior constrictor does not participate to such a degree in the paralysis, at all events in the present stage of the disease. This might perhaps be accounted for on the ground that this muscle receives a branch from the external laryngeal nerve, in addition to the supply from the pharyngeal plexus. It sometimes happens that the fluids which he is attempting to swallow are forcibly ejected, not only from the mouth, but through the nostrils. This is the result of some portion of the fluid finding its way through the chink of the glottis in consequence of the incomplete closure of the aryteno-epiglottidean folds. The next point to be noticed, and a most important one, is that the man is absolutely dumb. He cannot pronounce a consonant or vowel, and the only sound which emanates from the larynx is a grunt. This complete aphonia, according to Dumeuil, depends upon two causes—paralysis of the muscles of the larynx, and paralysis of the thoracic muscles. Indeed, physiological experiments prove that when the spinal accessory is torn off at its root complete aphonia ensues from relaxation of the vocal cords. As in almost all recorded cases, so in this: the paralysis is not confined merely to the parts just described. In this patient there is palsy of both arms, with muscular atrophy; this is considerably more marked in the left upper extremity than in the right. The thoracic muscles are also similarly affected, and it is impossible for the man to expand his chest by a deep inspiration. The lungs are healthy; heart sounds and respiratory murmur normal. On examining the eyes by the

ophthalmoscope the optic discs were found to be hyperæmic, scarcely amounting to neuritis. In fact, the special senses, sight, hearing, taste, and smell, are all perfect.

It is interesting to observe the comparison which this case bears to others which have been recorded. Trousseau says that this disease (and Duchenne agrees with him) begins gradually, progresses rapidly, and terminates fatally. In the case of this patient the reverse of the first two statements obtains, as the disease commenced suddenly, and up to the present time the paralysis is decidedly retrogressive. When the patient was first admitted both upper extremities were devoid of co-ordinating power. Now he is able to do a moderate day's work in the grounds—digging, wheeling, and so on. He is making flesh fast, and his intellect is in no way affected. Still, it must be understood that the motor paralysis of the tongue, pharynx, and larynx is quite stationary. The general improvement in his health is, for the most part, due to the regular and careful way in which he is fed, rather than to the administration of either medicine or faradisation. Potions of beef-tea and eggs are given regularly night and morning by means of a plain piece of india-rubber tubing, which he passes into the œsophagus through the nostril himself. And attention should be paid to this simple but effectual mode of passing the food into the stomach. There cannot be a doubt that careful attention to this point checked the onward progress of the disease, and saved the man from death by inanition.

It is interesting to trace the seat of the cerebral lesion by the state of the parts involved; and it is impossible to come to any other conclusion than that the motor tract and motor centre are the parts principally affected. In former recorded cases there has been found, upon post-mortem examination, atrophic degeneration of the roots of the eighth pair, as well as of the facial, hypoglossal, and anterior spinal. Therefore, by deduction, it seems most probable that these nerves are in this case the seats of lesion.

NEWCASTLE INFIRMARY.

LITHOTOMY; LITHOTRITY; EXCISION OF THE ELBOW-JOINT; SYMBLEPHARON.

(By Dr. ARNISON.)

For the notes of the following operations, performed on March 31st, 1873, we are indebted to Mr. G. Rowell, house-surgeon:—

Lithotomy.—A. D—, aged three years and a half, male, admitted March 27th, has been the subject of calculous symptoms for nearly two months. While anæsthetised by ether and chloroform, the ordinary sinistro-lateral operation of lithotomy, universally practised by the surgeons to this infirmary with uniform success (no fatal case for eight years), was performed by Dr. Arnison. Slight hæmorrhage occurred, which was speedily arrested by a plug of cotton-wool. Progress satisfactory, and patient has been discharged cured.

Lithotritry.—M. Y—, aged twenty-seven, married woman, had suffered from the usual symptoms of vesical calculus for two years, for which she was admitted on March 27th. On sounding, the calculus seemed fixed at the neck of the bladder. The calculus was dislodged, and crushed on March 31st by Dr. Arnison. For three days fragments of stone continued to be voided with the urine, attended with some increase in the mucous discharge, but no pain. Second crushing April 5th. The remaining fragment of stone was seized, though not readily, being apparently engaged in the corrugated vesical wall, and crushed. When the blade of the instrument was screwed nearly home, its further progress was arrested; and, on extra force being used to the screw, a sudden snap, of metallic character, was heard by the bystanders, giving the impression of a very hard nucleus. The lithotrite, on being withdrawn, presented between its blades some calculous débris, in which, on being washed, was found a common sewing-needle, broken into three unequal parts. The discovery of this afforded a ready explanation of the cause of the difficulty in disengaging the fragment from the wall of the bladder, and of the snap heard on crushing it. In answer to questions directed to find out the way in which the needle had gained admission into the bladder, the patient states that she accidentally swallowed a needle five years ago.—April 6th to

12th: No inconvenience experienced. The patient has been discharged cured.

Excision of elbow-joint.—Isab. S—, aged eight, fell, during play, twelve months ago, on her right elbow. An abscess formed, and was discharged by three openings up to the present time. The joint was excised by Dr. Arnison by means of a single longitudinal incision on the posterior aspect. The wound was brought together by sutures and dressed with carbolic oil, and the arm placed on a bracket-splint set at an obtuse angle.—April 1st to 12th: Steady declension of temperature from 102° on evening of 1st inst. to normal. Wound healthy, and united in greater part. Up to the present the case has done well.

Symblepharon.—William E—, aged forty-four, admitted with palpebral conjunctiva of right side united to ocular, over the lower half of the cornea. Dr. Arnison dissected the adhesion from the surface of the cornea, and fixed its upper part by suture to the bottom of the wound, corresponding to the inferior palpebral sinus or fold. The suture was removed on the third day, and the patient was discharged cured on April 9th.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 23RD, 1873.

MR. PRESCOTT HEWETT, PRESIDENT, IN THE CHAIR.

Mr. JOHN CROFT read notes and exhibited a case of

SUBPERIOSTEAL EXCISION OF HIP-JOINT.

C. B —, aged seven, was brought as an out-patient to St. Thomas's Hospital, on February 6th, 1871, suffering from the first symptoms of hip disease, on the right side, the result of a fall one month previously. His mother was in good health. A maternal aunt had died of consumption. His father died of rheumatic gout. He became gradually worse, and a large abscess formed on the outer side of the thigh, below the joint. On September 11th, he was admitted into the hospital, and the abscess was incised. On November 22nd, a slightly curved incision, three inches long, with its centre opposite the top of the great trochanter, was made down to the bone, dividing the periosteum. The soft parts were then turned aside, and the periosteum cut across at right angles to the first incision, just below the level of the small trochanter. With the bistoury the transverse division of the periosteum was carried round all but the inner and back part of the bone. Then, with a periosteal elevator, like Dr. Sayre's, the periosteum was easily peeled back. An attempt was also made to detach the muscular insertions from the great trochanter, but this was not effected without the use of a knife. The top of the femur was sawn off with a chain saw, just below the small trochanter. This mass having been turned out by the elevator, the acetabulum was freely exposed. Five roundish sequestra, varying in size from a small to a large pea, were picked out of the floor of the space. The portion of femur removed consisted of the head, neck, and two inches of the shaft, measuring from the top of the great trochanter. The wound was partially closed by sutures. After the operation the limb was kept at rest, and extended by means of a bracketed long outside splint, or extension by weight. At the end of four weeks, passive motion was commenced. In the following July, he was able to wear a boot and iron support. The last sinus finally closed at the end of the year 1872. When exhibited, eighteen months since the operation, he was in good health and spirits, and could run about. At the hip, very slight flexion and extension were allowed. The chief movement was of the pelvis on the spine. He could not rotate or abduct the limb. In this respect, therefore, Mr. Croft did not think he had been a gainer by the operation as he performed it. The limb appeared shorter than the opposite one. On measuring from the anterior superior spine of the ilium to the tip of the internal malleolus, the right leg was two inches shorter than the left; but on comparing the length of the right femur with the one not operated upon, the sound femur measured 11½ inches, and the right bone scarcely the eighth