sensitive impressions, diminish in proportion to the degree of irritation of the sensory roots.*

We have already seen that section of the posterior roots abolishes the tone or tension of the muscles to which they distribute fibres. (M. T. G. Brondgeest, *Archiv für die Holländischen Beiträge zur Natur und Heilkunde*, vol. ii, 1859 and 1860.) Whether this loss of muscular tone be due to the curious changes which, according to Brown-Séquard, take place in the condition of the spinal cord on section of the posterior roots, is not determined; but it certainly must add to the paralyzing effects of those changes. In the experiments above described, *all* the fibres of the posterior roots were divided, and therefore *all* the muscles to which they were distributed were paralysed or relaxed; but in locomotor ataxy, except in the very advanced stage, only *some* of the fibres of those roots are injured, and in a very irregular manner; so that some of the muscles would appear to escape, while others are paralysed or relaxed. The way in which this unequal tension of the different muscles produces incoordination of voluntary movements, I have already pointed out.†

DEATH FROM ACCUMULATION OF HAIR IN THE STOMACH OF A WOMAN.

By PALEMON BEST, M.B.Lond., Louth.

THE patient was C. C., a labourer's daughter, aged 30 years. On my first visit to her, in April 1869, she complained of severe pain in the stomach, vomiting and diarrhoea, great prostration, and suppression of catamenia. She said that these symptoms had lasted for several years, and were due to a tumour in her stomach. The patient was tall, thin, with an anxious expression of countenance, and marked pallor of the skin and mucous membranes. The tongue was small, red, with white fur at the back and middle; pulse 80, weak, regular; respirations 18, regular. There was no oedema of the feet. The urine was copious, with no albumen.

When she was undressed and laid on her back, with her knees raised, a tumour was readily felt, mainly occupying the epigastric region. The tumour seemed rather globular in shape, was smooth and hard, but not painful to touch; it was very moveable, more so on the left than on the right side, and could be pushed upwards and to the left for a considerable distance under the rib-cartilages of the left hypochondrium. It did not accompany the movements of the diaphragm in respiration. The lower margin of the tumour extended obliquely from the right hypochondrium downwards across the epigastric and umbilical to the upper portion of the left lumbar region. This margin, although rounded, was very clearly defined, and sometimes seemed to have a notch about its middle; at other times, this notch could not be felt. The upper margin of the tumour was not perceptible on palpation; and percussion did not separate the dulness it occasioned from that caused by the surrounding organs—the liver, heart, and spleen. Although the tumour appeared close to the anterior surface of the abdominal cavity, the passage of flatus along the stomach between it and the tumour could be seen and felt, as in the descending colon in cases of enlargement of the left kidney. Long continued pressure and movement of the tumour induced pain and vomiting.

The vomited matter consisted of solid food and dark coloured sour fluid; it only very rarely contained streaks of blood after much straining. The pain in the stomach, which passed to the back between the shoulders, was much increased after taking food; and this act had nearly always induced both pain and vomiting during the last six or seven years. The vomited food and liquid never fermented. The number of stools in twenty-four hours varied from two or three to seven or eight; they were dark coloured, watery, not very offensive, and about equal in quantity. She had never suffered from constipation lasting several days and followed by profuse diarrhoea. The quality of food had no influence on the vomiting or purging.

She had never had jaundice. She had enjoyed good health until twelve years of age, when she suffered from a severe attack of ague. The catamenia appeared at the age of 15. About this time (1854), she began to suffer from pain in the stomach and vomiting and diarrhoea, but was able to keep her situation as servant, or attend to domestic duties at home, until about six years ago. Since this time, she had been constantly under medical treatment, and unable to undertake any employment. Mr. W. C. Calthrop, who had attended her at various times since 1856, at this time (January 1863) detected a hard nodular tumour at the epigastrium. She stated that the tumour was then very

much smaller than now (1869), and could be pushed entirely out of reach beneath the rib-cartilages of the left hypochondrium. Mr. Calthrop believed that she had "scirrhus" of the stomach. She continued under his care, the tumour increasing in size, and other symptoms not materially changed, until 1865, when she sought parochial relief, and became a patient of the district medical officer whom I succeeded in April last. She remained under this gentleman's care from 1865 to April 1869, except during a short interval which she spent in the Hospital for Diseases of Women or the Surgical Home in London, her symptoms undergoing no other change than increase in her debility and in the size of the tumour.

Such were the leading features of the case on my taking it; and I was fairly puzzled by them—at one time thinking that there was an enlargement of the left lobe of the liver; at another time believing that it might be some unusual form of splenic enlargement, which, by pressure on, or adhesion and perhaps projection into, the stomach, caused the distressing vomiting and pain. The hardness of the tumour was probably too great for it to be colloid cancer of the stomach; and the age of the patient, the moveability of the tumour, and its long duration, were other objections to this view, and, *à fortiori*, to its being either scirrhus or encephaloid cancer.

The treatment at first pursued was that suggested by my partner, Mr. Bogg, who visited the case for me before I had seen it, and considered that the tumour was due to an accumulation of feces in the transverse colon. Although I differed from this opinion, free purgation by mouth and by enemata was employed at intervals during three weeks, but without effecting any improvement. Bismuth and soda and hydrocyanic acid also failed in improving the patient's condition. Citrate of iron was then tried, and a decided improvement followed its use; the patient felt much stronger; her spirits improved; and in June the catamenia, which had been absent for four years and a half, reappeared, and were again seen at the proper time in July and August. The vomiting continued about the same; the diarrhoea was much less troublesome; but the size of the tumour remained the same. In the autumn, she frequently walked distances of about half a mile and back. On September 7th, when stooping to glean in a harvest-field, she was seized with violent pain in the abdomen, and became so faint that she was obliged to be carried home. Peritonitis immediately set in. Opium, hot fomentations, and turpentine stupes, were used; and she took brandy, milk, eggs, beef-tea, etc. Temporary improvement occurred, but was followed by renewed attacks; and, after much suffering, she died on October 25th, 1869.

Permission to make a limited examination of the body having been obtained, this was done on October 27th by Mr. Calthrop and myself. The peritoneal coverings of the stomach and intestines were glued together by recent lymph. The peritoneum contained about ten ounces of dark coloured fluid, composed probably in part of brandy. On lifting the stomach to discover the tumour, it was found that this lay within the stomach, which I opened by a long horizontal incision along its anterior wall, from the cardiac nearly to the pyloric extremity. A black tumour covered with hair was removed from the stomach and oesophagus.

It formed an accurate mould of these organs, and somewhat resembled a very small black swan. (It has been photographed.) The exact weight of the tumour was thirty ounces (avoirdupois). On section, it

* For further information, see the paper from which these statements are taken.

† It would be an interesting experiment to divide in an irregular manner *only some* of the fibres composing each posterior root of the nerves.

was found to consist almost entirely of hair, with but little food and mucus; it was quite solid, and could be easily cut with a scalpel, owing to the softening of the hair by the action of the gastric juice. Many of the individual hairs composing it were ten or twelve inches in length. The stomach was otherwise empty and much hypertrophied; it weighed thirteen ounces (avoirdupois), and was removed with great difficulty, owing to the adhesions to the posterior surface. The mucous membrane was of a greyish-white colour. On the posterior wall was a perforation of the size and shape of a shilling, the surrounding mucous membrane appearing quite healthy. At some distance from this perforation were three growths arising from the posterior wall; two of these were about the size of a shilling, the other was as large as a half-crown; the greatest thickness of these growths was at their centre, and at the circumference they were very little thicker than the surrounding posterior wall; they appeared to arise from the mucous membrane itself; for, on removing this structure from the muscular coat in the vicinity of one of these growths, the growth was most easily removed with the mucous membrane. The greatest thickness of the largest of these growths was less than an inch; that of the posterior wall of the stomach, about a quarter of an inch; each growth somewhat resembled in appearance a very small inverted saucer; two of them were preserved in spirit, and, after two days' maceration, they exhibited a lobulated cauliflower-like structure.

The uterus and liver were the only other organs examined; the former was quite healthy; the latter rather fatty.

REMARKS.—The inability of any of the many medical men who saw this case to arrive at a correct diagnosis, is probably mainly due to the extreme rarity of cases resembling it. During my studentship and since then, I have never heard of a similar one.

The œsophageal portion of the tumour was, I believe, forced from the stomach into this position by the contraction of the stomach on the mass of hair within, during vomiting and digestion; several of the hairs in the œsophageal portion being easily traced into the larger mass in the stomach; and, but for the presence of the perforating ulcer in the stomach, the patient might have lived long enough for the œsophageal end of the tumour to be protruded into the mouth, so that a correct diagnosis must have been made.

The perforation of the posterior wall of the stomach, which led to the peritonitis that caused death, was probably due to an ordinary simple chronic ulcer of the kind frequently met with in young women. The rupture of the floor of this ulcer was probably hastened by the presence of so large a foreign body in the stomach, during the act of stooping.

The three projections from the mucous membrane of the posterior wall might be due to the irritation caused by the mass of hair.

That this mass of hair was swallowed since the discovery of the cancerous masses which Mr. Calthrop believed he felt six years ago, and that by its pressure on them it caused their partial absorption, is more than I can believe possible; although I feel it right to mention this gentleman's opinion on account of the long connection he has had with the case, the great interest he has taken in it, and his great kindness in forwarding to me all the information which he could collect relating to the patient's previous history.

The patient's relations and friends, after the *post mortem* examination, all bore testimony to the extraordinary habit of eating her hair in which she had, during the last fifteen years, indulged. Whether this habit relieved any morbid feeling at the stomach, must be left for others to decide, when the specimen is exhibited at the Pathological Society.

P.S.—The photograph is incorrect in showing so many of the hairs projecting from the tumour; when first removed, there was scarcely a single hair projecting from the rest.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

TOXIC ACTION OF QUININE.

By JOHN C. THOROWGOOD, M.D.

MR. HEMMING's account of the lady, who, after taking a few grains of quinine, came out in a rash resembling scarlatina, recalls to my mind the case of a young woman, among my out-patients at the Victoria Park Hospital, who, at her second visit, told me I had been giving her quinine. It was true that I had prescribed quinine for her; and she told me she knew it to be so from her having come out in a rash all over the body, after two or three doses had been taken. What remained of the rash when I saw her, reminded me of the measles; and she told me that on four, if not five, occasions, when quinine had been prescribed, this same rash had invariably appeared.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

OPERATION DAY, DEC. 4TH, 1869.

MR. SAVORY performed Amputation of the left upper extremity at the Shoulder-joint in a woman about forty years of age. She had been a patient in the Hospital two years ago with an extensive ulcer in the forearm and elbow. Various remedies were then employed without success, and at last amputation of the arm was resorted to. Examination of the diseased part after removal afforded evidence of the malignant character of the ulceration. The stump healed satisfactorily. Three months ago, a cancerous mass commenced in the cicatrix of the stump; and, on her being again admitted to the Hospital, it was resolved to amputate the remainder of the limb at the shoulder-joint. The patient lost exceedingly little blood.

Mr. Savory removed the lower extremity of a boy about ten years of age, for acute destructive Disease of the Knee-joint. When admitted three months ago, it was hoped that rest and proper treatment would offer a fair chance of anchylosis. At first, it was expected that no severer measure than excision of the joint would have to be resorted to. He, however, did not progress as might have been expected; his pulse and temperature rose, his appetite failed, and his state was altogether unfavourable. Mr. Savory opened the joint, and gave exit to some pus, after which the symptoms somewhat abated, but only for a few days. The pulse rose to 160 per minute, and, proportionately with it, the temperature; and his state in other respects became most serious. On the 2nd and 3rd of December, he somewhat improved; and, this continuing to-day, Mr. Savory determined on seizing the favourable opportunity, and amputating the limb to save the boy's life. The limb was amputated immediately above the knee-joint. An anterior elliptical flap was made, and the posterior flap formed by the knife being brought directly backwards. When it was dissected backwards, and the bone sawn through, an admirable stump was obtained. The affected joint was enlarged; and, when opened, presented, Mr. Savory observed, a very fine specimen of acute disease involving all the structures of the joint. Very marked granulations had sprung up in the position of the external condyles.

Mr. Savory also removed from a young woman a large Fibro-cellular Polypus, which originated in the posterior nares, and hung down into the pharynx. By supporting the polypus by means of the finger from the mouth, Mr. Savory was enabled to obtain a firm grasp of the growth with the forceps when passed through the nares.

Mortality in the Hospital from Amputation of the Lower Extremity.—We saw several cases of recent amputation of the thigh in Mr. Holmes Coote's wards which had been entirely treated with simple dressing. Mr. Coote during the year has treated in his wards four cases of amputation of the lower extremity above the knee, and two cases below the knee, on the same plan, and without one fatal result. He is opposed, unless in cases of sloughing, to the carbolic acid treatment in any shape. Mr. Holden, we were informed, had treated eight cases of amputation of the lower extremity successfully in the same manner.

MIDDLESEX HOSPITAL.

DIFFUSE ORBITAL ANEURISM IN A BOY.

(Under the care of Mr. GEORGE LAWSON.)

In the Percy Ward of the above Hospital there is now a lad, aged 15, suffering from what appears to be a diffuse or consecutive aneurism of the orbit. It was caused by an accident five years ago. The boy was jumping off a wall about four or five feet high, when he fell on the end of a stick, which struck the inner side of the left orbit, and pushed, he says, "the eye outwards." There was considerable bleeding at the time—he thinks, "about a pint." The eye was as prominent a week after the accident as it is now. In his present state, the globe is protruded about half an inch from the orbit. The movements of the eye in different directions are in no way impeded. The conjunctival and subconjunctival vessels are tortuous and dilated. The lids close easily over the globe. No tumour can be felt within the orbit by an examination made with the finger pressed within the orbital walls. There is no visible pulsation of the eye; nor is a pulsation communicated to the fingers when they are placed firmly against the globe. A distinct *bruit*