

PHYSIOLOGICAL OBSERVATIONS UPON DR. HARLEY'S "AUTO-CLINICAL REMARKS."

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THE short report of Dr. Harley's case, published in the columns of *THE LANCET* last week, under the title of "Auto-Clinical Remarks," is one of great interest, not only pathologically as an instance of a rare form of disease, and therapeutically as indicating the value of rest in the treatment of retinal affections, but also physiologically in reference to the singular phenomena observed. Whilst making a few comments upon the report, I may be permitted to offer my congratulations, in common with many others of the profession, to Dr. Harley on the restoration of his sight, and to trust that his recovery may be permanent. His symptoms appear to have been due to a condition of hyperæmia (sufficiently attested by the rupture of one or more of the vessels), occasioning an extraordinary exaltation of the sensibility of the retina, but not accompanied by what must be regarded as the essential feature of inflammation—interstitial effusion. At all events, when inflammation is really present, hyperæsthesia and extreme intolerance of light are not in general prominent symptoms. Looking at the case from a purely physiological point of view, the three effects noticed—of abolition of the powers of distinguishing colours, of appreciating distance, and the greater persistence than usual of images on the retina—are all instructive. That long retention in darkness abolishes the power of distinguishing colours is interesting, not only as proving that the more refrangible rays of light produced by more rapid undulations are really the most powerful exciters of the retina—greys, reds, and browns giving the sensation of blackness, or the negation of colour,—but also as furnishing another instance of similar effects being producible by opposite causes, the same phenomena being observed, though not in quite so marked a degree, in the healthy eye by short exposure to excess of light, as by looking at the sun for a few moments, or even at the glare of the electric light. In both cases the results are the same, though in one occurring in a retina the sensibility of which has been modified by prolonged rest, and in the other by over-stimulation.

The extreme elongation or extension of all objects noticed by Dr. Harley is a phenomenon of not very unfrequent occurrence after the application of Calabar bean to the eyes, and the term macropsy has been applied to it. The opposite condition (micropsy)—all things looking smaller than natural—is occasionally seen after the instillation of atropine. It is not easy to offer an explanation of these effects. Two conditions which were also probably present in Dr. Harley's case are common to both—namely, the loss of the power of accommodation, and immobility of the iris. It has occurred to me that the great extension noticed after the Calabar bean and by Dr. Harley might possibly be explained by, or rather be connected with, diminished sensibility of the retina for the lower tints of colour; for as we judge of distance very much by play of light and shade, and as objects in proportion to their remoteness appear of duller tints and less defined, so the retina in his case, taking less cognisance than usual of more distant or more feebly illuminated objects, led the mind to refer them to a more remote position than they actually occupied, thus giving the impression of elongation. Or it might otherwise be explained on the supposition that the retina, become highly sensitive by prolonged rest, perceived innumerable gradations of light and shade in every object which usually pass unnoticed, but which here filled the mind, and gave the impression of space, just as the apparent field of vision is in every eye increased in proportion to the number of objects seen in it.

In regard to the great persistence of impressions made on the retina during Dr. Harley's recovery, I may remark that I have observed the retina is much more retentive of the images of external objects in the morning, especially soon after waking, than at night.

Those who are engaged in the practice of ophthalmic surgery will be interested to receive further details of Dr. Harley's case, and to know what means were adopted to obtain "total darkness."

Seymour-street, W., Feb. 1868.

ON A CASE OF EXCISION OF, AND AMPUTATION AT, THE HIP-JOINT; RECOVERY.

By J. H. BARNES, Esq., M.R.C.S.,
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JOHN M'K—, aged eleven years, two or three weeks previous to his removal to hospital on the 6th of July, 1867, was in the street on his hands and knees, when another boy jumped suddenly on his back, causing "his right leg to give way under him, and producing an acute pain in his hip." For a few days he was able to limp about his room; but the pain increasing, and the leg commencing to swell, he was obliged to keep his bed.

On admission into hospital, there was found to be great swelling and enlargement of the limb from the hip to the knee. The thigh was adducted and rotated over that of the sound side, on which he constantly lay; and any effort to change the position of the injured limb, or examine it minutely, gave rise to such suffering that it was not persisted in. He was, therefore, placed on a diet suited to his weak and depressed state, and the hip and thigh enveloped in poultices. Fluctuation becoming in a few days more pronounced, an incision was made on the inner aspect of the thigh, just above the knee, this being (in the position in which he kept his leg) the most depending point. From this opening pus was freely discharged, and the swelling at the hip daily diminishing, a more satisfactory examination of it became possible. Fracture of the neck of the femur, with dislocation of the head on the dorsum ilii, was diagnosed; and as the patient, in spite of everything that could be done to keep him up, was rapidly getting weaker, being so emaciated that his forearms were bi-concave and translucent, I resolved on at once excising the hip-joint.

The patient, on the 15th of August, having been carried into the operating-room and placed under the influence of chloroform, I made a horseshoe incision down to the joint, commencing at a point posterior to the great trochanter, and terminating it at a corresponding point anteriorly. On clearing the parts and introducing a finger, I felt, as I expected, the detached and dislocated head of the femur, and removed it. The thigh-bone being now projected through the wound, a portion of it, all that was seen to be denuded and diseased, was removed. On a further examination, however, of the shaft of the bone, it became evident that any effort to save the limb would be fruitless, and I determined at once on its removal.

Two difficulties now met me. In the first place, I had only two assistants, and the patient was so anæmic and prostrate that the slightest loss of blood would at once be fatal; and, in the second place, the posterior flap had been spoilt by the previous incisions, and the patient was such a skeleton that it was no easy matter to discover tissue sufficient to form a respectable stump from.

The first difficulty was obviated by placing an abdominal tourniquet over the aorta; and the second, by ignoring the first incision and suturing it partly up afterwards. So complete was the stoppage of the circulation through the aorta that the vessels were taken up and ligatured without the loss of a drop of blood. Before the conclusion of the operation, however, the patient apparently quietly died. All signs of animation ceased; the chest was perfectly still, and no pulse could be detected at the wrists. Thinking the pressure of the tourniquet on the abdomen might be producing an injurious effect, I at once removed it, and with the aid of mechanical and stimulative assistance suspended animation was slowly restored.

For the following notes of the case I am indebted to Dr. Robertson, to whose care and attention the recovery of the patient is greatly due.

First day after operation.—Pulse feeble and rapid; much thirst, and little sleep.

Second day.—Pulse 120, stronger; slept better; takes food well. Stump healthy.

Third day.—Pulse 130; bowels loose, and ejected matter very offensive; had a moderately good night. Stump commencing to discharge.

Fourth day.—Pulse 140; feverish, and little sleep.

Fifth day.—Pulse 135; skin hot. One of the ligatures came away.

Sixth day.—Much the same. Two more ligatures came away.

Seventh day.—Feverishness gone; bowels still loose, with dark offensive motions.

Eighth day.—Patient extremely emaciated and weak. Ordered iron and quinine, and pancreatic emulsion.

Ninth and tenth days.—Edema of the left foot and leg, which is painful and contracted at the knee-joint. Ordered to be kept in cotton-wool.

Eleventh day.—Femoral ligature came away. Troublesome cough, with much expectoration. Left leg pits on pressure up to the knee.

Twelfth, thirteenth, and fourteenth days.—Pulse 120; sleeps well, and eats well. From this date the patient, who was placed on an unlimited amount of the best claret (this being the only stimulant given), steadily improved. The edema of the leg subsided; and at the beginning of October he was able to sit up dressed, and the wound had almost entirely healed. He now (January, 1868) only waits for an artificial leg in order that he may walk home. The stump has long since completely ceased to discharge and closed up, and the patient declares himself to be stouter and healthier than he was previous to his injury.

So powerful is the force of example, that another boy in the same ward suffering from hip-joint disease persists in begging and entreating that his leg might be removed also.

Liverpool, Jan. 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. Proœmium.

KING'S COLLEGE HOSPITAL.

LARGE IVORY TUMOUR OF THE UPPER JAW; EXCISION; DEATH.

(Under the care of Sir WM. FERGUSSON.)

WE briefly referred, in THE LANCET of the 7th of December, to the following case, which is of so rare and interesting a character that a detailed account of it deserves to be recorded. Mr. H. Royes Bell, surgical registrar, has kindly furnished us with the notes. The patient's case was taken by Mr. R. Caldecott, dresser.

G. H.—, aged twenty-one, a healthy-looking young labourer from the neighbourhood of Ipswich, was admitted into the hospital in consequence of a large tumour which occupied the superior maxillary region on the left side. This has been present for the last twelve years, and gradually increased for six or seven; but since then it has remained about the same. Two years ago a quack burnt a hole in the tumour with caustic at the inner part. There is a large tumour on the left side of the face, extending from the lower margin of the left orbit to a line an inch above the mouth, rounding off from the outer margin of the orbit to the left ala of the nose. Internally it encroaches on the nose, displacing it a little to the right side; the left ala is flattened in the column, and that nostril is blocked by the tumour, which projects into it, and may be seen as a rounded mass. The left nasal bone is pushed in front of the tumour. The right nostril is quite free. The floor of the orbit is involved, the eyeball being displaced upwards, forwards, and a good deal outwards. This causes a good deal of deformity. The lachrymal caruncle is two inches and a half from the middle line of the nose; the eye cannot be perfectly closed, as there is a slight ectropion in consequence of the lower eyelid being attached to the tumour. There is no overflow of tears. The movements of the eyeball are nearly perfect, and the sight is useful enough, although not so good as in the other eye. Below, the tumour extends to the alveolar ridge, and can be felt in the mouth above the gums. There is

no displacement of the palate, and the tumour cannot be seen in the pharynx. The surface of the tumour is hard and smooth, and, from its appearance and history, judged to be an osseous one, which diagnosis is borne out by the appearance of some rough, black-looking bone which occupies the hole made by the caustic. Some mucus dribbles through this aperture. The tumour is painless, and the man's general health appears to be excellent.

Operation.—On November 30th, the patient having been placed thoroughly under the influence of chloroform, administered on lint in the usual way, Sir William began by cutting the upper lip exactly in the median line; the incision was then continued upwards along the left side of the nose as far as the margin of the hole made by the caustic, and again from the upper margin of this aperture to a point a little below and external to the orbit. Here a perpendicular cut was made to allow of the free application of the saw. The flap thus formed having been dissected back, the whole of the surface of the tumour was exposed. The eyeball was then carefully dissected from the orbit. The saw was then applied to the external and internal attachments of the tumour, and horizontally along the fossa above the teeth. The tumour was then forcibly grasped by a large pair of lion forceps, which slipped continually in consequence of the extreme hardness of the tumour. As the mass could not be moved by the forceps and elevator, a further application of the saw was made, especially at the inner and upper angle of the tumour. It was then removed without difficulty, bringing away with it the floor of the orbit. A few portions of the growth still attached to the interior of the cavity were then removed, and the bleeding from one or two vessels was readily stopped by the application of the actual cautery. The incision in the lip was then brought accurately together by hare-lip pins, and the rest of it by sutures. A piece of sponge was then placed in the cavity left after the removal of the tumour, so that the eye, which had hitherto been supported by an assistant, was prevented from falling. The patient, who had not lost more blood than generally takes place in an ordinary operation on tumours of the upper jaw, was then removed to the ward.

Dec. 1st.—Patient is doing remarkably well. Has slept well during the night, and takes his food without the least difficulty. Has not suffered any bad effects from the chloroform.

2nd.—Patient expresses himself as feeling very comfortable. Pulse strong. The upper eyelid is a good deal swollen, and the conjunctiva raised by fluid beneath. Sir William punctured the conjunctiva in several places, and a good deal of serum escaped. The tongue coated slightly, but moist. Pulse 110, full and strong. Wound looks well.

3rd.—One A.M.: The house-surgeon again punctured the conjunctiva in several places. The swelling has gone down since the afternoon.—Ten A.M.: Mr. Wilcox, the house-surgeon, was called to him between eight and nine A.M., and found him very faint and restless. He was ordered to take as much brandy as he could swallow. Ether and ammonia were also given; but he gradually sank. His lips became white, and his pulse imperceptible. He sank gradually, and died at a quarter past ten A.M., remaining conscious to the last. The only complaint made by the patient was that on the evening of the 2nd his heart palpitated and caused a sense of uneasiness; and again when the house-surgeon was called, when he had a feeling of faintness, and a sensation as if he were dying.

The tumour weighed ten ounces and a half; it is irregular in shape, and about the size of a large fist. It seems to be composed of two parts, a rough cancellated structure, and a white ivory mass. The white ivory mass consists of two parts, of unequal size; the upper part is much the larger of the two, the lower being a process of the upper extending into the free space behind the nares. At the points where the tumour is free the margins are rounded like marbles. The large mass which composes the inner part of the tumour extends horizontally outwards, giving off the outer descending portion from its outer angle. Between this process and the main portion is the cancellated tissue, which likewise runs at the back of the tumour, and also along its upper portion, obliterating all trace of the proper floor of the orbit; this seems to be the portion by which the tumour was so extensively attached. The ivory portion is movable on the cancellated portion slightly.

Report by Dr. TRIMEN, curator of museum.—The ivory mass is the true tumour, and shows a tendency to separate from the supporting bone, as in Mr. Hilton's case ("Guy's Hospital Reports," vol. i., pp. 498–506). At the junction of the ivory mass with the cancellated bone tissue is a thin layer of soft