On a case of calcareous degeneration of the lens following injury : removal after seventeen years / by Alex. Garden.

dition most truly deplorable, especially when it is remembered that both the sexual and social relations of life are annihilated by such a calamity. But, let me ask, What prospect is there of restoring a permanent passage when between two and three inches of the urethra have been utterly destroyed? I have already stated,—I believe, none whatever. The experience of others may, however, lead them to think differently. If this be so, I may yet learn how to apply a remedy in the case I have narrated.

Temple-row, Birmingham, March, 1861.

ON A

CASE OF CALCAREOUS DEGENERATION OF THE LENS FOLLOWING INJURY.

REMOVAL AFTER SEVENTEEN YEARS.

BY ALEX. GARDEN, M.D.,

CIVIL ASSISTANT-SURGEON, GHAZEEPORE.

ON the 25th of February, 1860, I was asked to send some lotion for an inflamed eye, by the subject of the subjoined case, the Rev. ——, and so unimportant did he consider it, that I did not see him to examine the organ till the 27th, when I found the right eye in the following condition:—Close behind the cornea, at the lower part of the anterior chamber, and lying obliquely, with its posterior border resting on the iris, was a white, hard-looking body,—evidently the lens,—opaque, and dislocated. By holding his head backwards, and shaking it slightly, the lens could be made to fall back into the posterior chamber, its usual position, according to the history given by the patient. As an organ of vision, the eye was perfectly useless, the sight having been destroyed seventeen years before, the eye also having become somewhat shrunk and flattened. There was a considerable amount of ocular conjunctivitis, and the sclerotic was affected at the lower part, nearest where the lens, now a foreign body, rested, as shown by the pink colour of that membrane. There was severe pain, and a constant aching, increased, through sympathy, when any attempt was made to use the left eye. Leeches, applied by the patient himself, had failed to give the relief they had done on former occasions. The patient was sound in health, thirty-two years of age, and four years resident in India. He gave the following history:—

Seventeen or eighteen years ago he received a blow on the eye from a stone, whereby dislocation of the organ was produced, and with it loss of vision, a slight perception of light alone remaining. The eye subsequently became flattened, and ultimately the lens became opaque. Some years ago he consulted the late Mr. Guthrie, with a view to having the lens extracted; but that eminent surgeon did not deem the operation advisable, as no good could come to the injured eye, and nothing had happened for years to cause fear of any untoward event, whilst the operation might weaken the sound eye. In 1856 he first noticed the white body in front of the eye, which could be moved to the front of, or behind, the iris at will, by simply moving his head backwards or forwards. Since that period he has several times suffered from conjunctivitis; but on all occasions it yielded to the application of leeches, and the use of lotions.

On Feb. 29th, 1860, in consultation with my friend, Mr. Palmer, the conclusion was come to, that the sooner the lens—the *fons et origo mali*—was removed the better. It was seen still lying in the anterior chamber, resting on the lower part of the cornea. The sclerotic inflammation was much increased, and, in addition, four or five large vessels were seen coursing upwards to the margin of the cornea where the lens rested, similar to those seen in ulcus corneæ, but more diffused; and no doubt ulceration would have been Nature's method for getting rid of the foreign body, the lens. The patient's sufferings were much increased, and he was totally incapacitated for work of any kind.

At half-past seven A.M., on March 1st, aided most kindly by Mr. Palmer, I proceeded to perform the usual operation for extraction, by section of the upper half of the cornea. I may here remark, that the necessity for immediate operation was clearly shown by the great increase of the inflammation since the previous evening, chemosis on the inner side having commenced. The section of the cornea was performed readily and satisfactorily, but, owing to the patient's extreme nervousness, it was long before the lens was extracted, and then only by the administration of chloroform. The lens was then found lying in the posterior chamber, at the lower part, but it at once slipped through the section by the aid of a gentle lift with the curette. Having satisfied myself that all the parts were in their proper places, the eyelids were closed and fastened by strips of plaster, and a light bandage placed over the eyes. On examination, the lens was found opaque, white, and very hard, like a piece of marble or Parian ware; in fact, in a state of calcareous degeneration. The good resulting from the operation was most marked, for the severe pain and aching stopped almost at once, and beyond slight uneasiness in the morning, the patient never complained of anything. The progress towards recovery was so rapid and satisfactory that a detailed daily report would be useless.

For the first three days he was kept entirely in the dark, his diet being mild and unstimulating. On March 5th, I found the corneal wound closed, the aqueous humour reproduced, and the eye looking fuller and more prominent than before the operation. There was still a great amount of conjunctivitis, but no pain. From this time light was admitted by degrees, and he returned to his ordinary diet.

A fortnight afterwards the state of the eye was as follows:—Pupil clear and distinct, slightly tremulous; eye fuller than before the operation; a little conjunctivitis still remains; he can use the sound eye without inconvenience. When he left the station on May 1st, his eye was in the same condition.

The remarks I have to offer on the foregoing case need be but few. It is not as a case of calcareous degeneration of the lens, following injury to the eye, that I desire to record it, for such cases are by no means rare; but it is to draw attention to the length of years during which the lens—degenerated in structure, consequent on a severe injury to the eye, whereby its connexions were disturbed—remained in its proper place, apparently harmless, causing no mischief either in the injured eye directly, or the sound eye by sympathy, and then finally escaped from its capsule; and even then, when pre-eminently a foreign body, capable of giving rise to the most serious consequences, remained almost innocuous for a period of four years, producing no symptoms of import. It would be interesting to determine how, after resting for so many years in its proper locality, it at last burst bounds. Probably the capsule suffered by the first injury, but not sufficiently to allow of the escape of the lens, and thus, weakened in its structure, required but some great disturbing cause, such as the violent retching during sea-sickness, for it to give way, and set free the lens; for my patient first noticed the lens in its abnormal position very shortly after landing in India from England. Or could the hard and heavy lens have had power sufficient to cause absorption of the capsule by pressure?

Regarding the treatment—the necessity for operation—nothing need be said. The rapid increase of the inflammation and of the patient's sufferings rendered it imperative. A few words with respect to the administration of chloroform. Inadmissible as it may be generally in cases of section of the cornea, there were two circumstances that led me to employ it without much fear in this case: 1st, that it was impossible to leave the eye with safety as it was, and, at the same time, the patient's nervous terrors would not allow us to even touch the eye; 2nd, the eye being already useless, there was no dread of destroying the sight to deter me. As it was, the dreaded vomiting did occur; but fortunately with no worse result than emptying the patient's stomach. If the case had been left to itself, ulceration of the cornea at the lower part would have occurred; for Nature was already bracing herself up for the task—a slow and clumsy process after all, and one during which the other eye must inevitably have suffered through sympathy. The only other point is, whether it would not have been better to have removed the lens years ago. As matters turned out in this case, it was, perhaps, as well not to interfere whilst the lens was in its place, for any risk to an organ so all-important to a clergyman was to be avoided; but when, four years ago, it first escaped from the capsule, removal would have obviated the attacks of inflammation in the unsound eye to which the patient had been so liable.

Ghazeepore, 1860.

A WORD ON TRACHEOTOMY.

By C. F. MAUNDER, ESQ., F.R.C.S.,
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IN the performance of tracheotomy, the introduction of a canula under circumstances requiring its use is usually deemed to be the most difficult step in the operation—a difficulty due to the constant and rapid elevation and depression of the trachea during respiration and deglutition. This difficulty is especially felt in children, in whom the windpipe is small and yielding. To overcome this obstacle I would beg to suggest a procedure which will facilitate the completion of the operation.

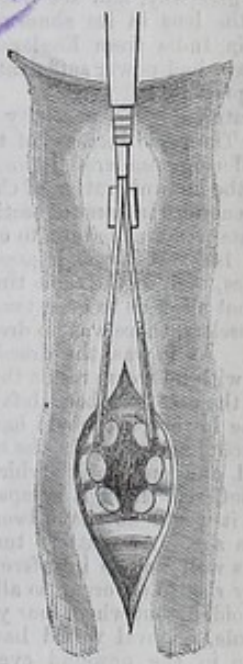
The trachea having been incised longitudinally, the operator should insert the point of a *double* hook through the incision into the windpipe, and hold the latter elevated and fixed; he should then slip up the clasp and allow the halves of the hook to separate by their own elasticity, and so to widen the slit in the trachea; this done, the canula may be passed into the tube with comparative ease, and the hook withdrawn.

Should any difficulty be experienced in the attempt to open the trachea after division of the softer tissues, the organ may be fixed in the adult by holding the cricoid cartilage firmly with the finger and thumb, or by a sharp hook inserted into the latter cartilage through the upper angle of the wound. In the child the sharp hook should be used.

Although a double canula be used and the inner one be removed at intervals, cleaned, and replaced, still mucus becomes inspissated, and, adhering to the extremity of the larger tube, offers a serious obstacle to respiration. This inconvenience may be remedied, while the inner tube is being cleaned, by the careful introduction of a small elastic catheter—well warmed, so as to soften it, and oiled—quite through the larger tube just into the trachea. By this means a passage is cleared and the obstruction is removed.

Again, although a double canula be used, mucus collects at the further extremity, and cannot always be dislodged either by cleaning the inner tube or by a catheter or feather; both must therefore be removed and cleaned, or be replaced by others. This necessity occurred to me in a case recently under my care; and in order to obviate the difficulty anticipated on re-introduction of the cleaned tubes, I first removed the inner canula, and then passed a small elastic catheter, well softened in hot water, through the outer tube into the trachea, and, maintaining it there, withdrew the tube over the catheter, and, as soon as it was cleaned, passed it back again along the catheter, still in the trachea, till the former occupied its original position; the catheter was then removed from the trachea.

The catheter served both as a tube by which respiration could be sustained, and also as a guide for the re-introduction of the canula, after the manner of Wakley's catheters.



The figure shows the cut ends of three rings of the trachea, with their edges separated by the double hook sufficiently to admit of the ready introduction of a canula. The handle of the hook rests upon the patient's chin. Should the retention of a canula in the windpipe be deemed injurious, the slit may be kept permanently open by reversing the position of the double hook.

New Broad-street, March, 1861.

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

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

KING'S COLLEGE HOSPITAL.

MELANOTIC TUMOUR OF THE LEFT ARM, GROWING FROM THE CICATRIX OF A MOLE ERADICATED BY CAUSTICS.

(Under the care of Mr. FERGUSSON.)

SINCE the last report of cases of melanosis in the "Mirror," nearly four years ago, we have met with comparatively few examples of the disease. During the last few months, however, two instances have presented themselves, wherein it was developed in the form of tumours; these we now publish, and add the sequel of a third case which appeared in a previous "Mirror."

The most frequent seat of melanosis is the eye or its appendages; next in frequency come the skin and subcutaneous areolar structures. Moles, when irritated by some cause, often give rise to tumours of this kind; and these may assume either the benign or malignant form of the disease. Although in the great majority of instances melanosis is associated with some one of the varieties of cancer, it must be understood that the melanotic pigment *per se* does not constitute malignancy. Into this question we entered on a former occasion (THE LANCET, vol. i. 1856, p. 657). Dr. Walshe has, besides, clearly proved the incorrectness of the opinion of some pathologists—that accumulations, whether fluid or solid, having a black colour, are not actually cancers. (See his valuable monograph on Cancer, p. 184.)

In each of the following cases the black deposit was associated with medullary cancer; therefore they form illustrations of "black cancer" properly so called—a term which should be restricted to melanosis when it produces a deposit in either the scirrhous or encephaloid carcinoma.

The seat of the disease in the first case was the cicatrix of a mole which had been destroyed by caustics. It is very probable that some granules of pigment remained to form a nidus for the propagation of the disease, now associated with cancer. The tumour commenced to form three years ago, as soon as cicatrization was complete; it was not larger than a walnut when removed, but was evincing a disposition to augment rapidly. Its true character was quite apparent on examining a section of it afterwards. For the notes of the case we are indebted to Mr. Charles S. Matthews, house-surgeon to the hospital.

J. B——, aged thirty-nine, single, a cook, and a member of a healthy family, admitted into No. 3 ward, January 30th, 1861, with a small melanotic tumour of the left upper arm. The history is, that a small mole had existed on the arm as long as she can remember. Some three years ago she observed that it had become raised a little above the general surface, and had assumed a warty appearance. To rid herself of it, she had caustics applied, producing a small ulcer, on the site of the mole. This soon healed, and then the tumour first began to grow in the cicatrix. It has caused her a good deal of pain, and has been gradually increasing in size up to the time of her admission, when a tumour was found on the inner and back part of the arm, three or four inches above the con-