CASE OF A TUBE IMPACTED IN THE LACHRYMAL DUCT FOR NEARLY NINE YEARS.

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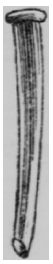
A LADY, sixty-one years of age, consulted me in March 1847. She stated that, nine years previously, whilst in France, she was attacked with inflammation of the right lachrymal duct, and an abscess formed, which was opened; after a time the wound healed, but left the passage impervious. The duct was therefore pierced with a trochar, and a gold tube introduced by a French oculist. The operation was attended with considerable suffering from the size of the tube, which required much force to place it in position; irritation followed, but gradually subsided under the use of fomentations. The skin healed over the tube, and for nearly six years it answered well; but at the expiration of that time, the patient became annoyed by deep-seated pain in the region of the duct, and an offensive discharge from the right nostril. After these symptoms had existed six months, an abscess formed and burst externally; the wound did not heal, but constantly gave exit to an abundant fœtid discharge, which also flowed from the nostril. An eminent oculist at Paris was consulted, who examined the parts, and arrived at the conclusion that the tube was no longer in the duct, and that the symptoms arose from necrosis of the bone. He recommended frequent syringing with an infusion of walnut leaves, and introduced a silver style into the duct. The discharge, however, continued, and an unhealthy, unsightly sore formed at the corner of the eye, which after a time caused partial eversion of the lower lid. For three years this continued, rendering her extremely miserable, for the discharge was so offensive that she was quite debarred from society. During this time she consulted two gentlemen of eminence in London, who coincided in opinion with the Parisian oculist, that the tube had escaped from the duct.

On examination, a puckered granulating sore, about the size of a fourpenny piece, marked the situation of the orifice; a fine probe passed with facility into the nose, and in its passage struck against a hard substance which had been considered as denuded bone. From no pain or sensation being excited by the strokes of the probe, I was inclined to the belief that the substance was metallic, and that the tube was in the duct as asserted by the patient, although I could not, with the utmost care, discover its edge.

The granulations bleeding profusely, and the patient becoming excited, further proceedings were deferred until the following day.



The duct was then cut down upon, and on the wound being dilated, the edge of the tube was clearly seen at the depth of full a quarter of an inch; with some difficulty it was grasped with a pair of strong forceps, but nearly as much force as I was capable of exerting was required to pull it out, so firmly was it impacted. Considerable hæmorrhage followed, but was arrested by cold water and the injection of a solution of alum. The patient was directed to syringe the duct thrice daily with a solution of hypochlorite of soda, and, after four days, the

offensive discharge had entirely ceased. On the fifth day a small style was introduced, and at the expiration of a fortnight the sore had healed; a slight eversion of the lid, with a puckered indentation, only remaining to indicate its situation.

REMARKS. Heister was, I believe, the first who proposed to cure fistula lachrymalis by the introduction of a canula into the nasal duct; his plan was to perforate the os unguis, place the canula in position, and allow the skin to heal over it. This proceeding was unnecessarily severe, but a great improvement upon the barbarous surgery of his predecessors. Upon it, Mr. Wathen again improved, by inserting the canula into the duct without injuring the bone; at first the prospects of success were most flattering, but, after a time, the plan was found open to many objections. The tubes shifted their position in the canal, sometimes rising too high, at other times sinking too low. A modification of the form of the tubes was proposed by M. Pellier, a French oculist, but experience proved them to have equal disadvantages with the originals, consequently the persistent tubes were generally abandoned in this country for the style, which, whilst it permits the passage of the tears by its side, is smaller than the canula, creates less irritation, and can be withdrawn and replaced with facility, a proceeding which ought never to be neglected beyond a week; it is better, indeed, to remove it every fourth day, to syringe the duct with a weak solution of alum, or if there be offensive discharge, with diluted liquor sodæ chlorinatæ—one part to fifteen of water—to wash the style and replace it. The surgeon should explain how this is to be done, and a little practice will enable any patient to manage it with facility.

On the continent, the old plan of the canula was extensively used by Dupuytren, and is still adhered to by some foreign oculists. The case above related offers a fair example of the consequences to be expected from its use. For a time all goes on smoothly enough, and the patient is flattered with hopes of a perfect cure; but, sooner or later, irritation is set up, and unless the tube be removed, it becomes buried in granulations, is firmly impacted in the canal, and caries of the bones forming its boundaries, with all the attendant miseries, will be the probable result.

It is very important, when consulted by a patient labouring under obstruction of the lachrymal duct, to ascertain the condition of the mucous membrane of the nostril. This, especially in strumous subjects, will often be found thickened, congested, and ulcerated. The obstruction to the passage of the tears may, in such a case, arise either from the closure of the lower orifice from this condition of the schneiderian membrane, or from the extension of the morbid changes into the duct itself. Under these circumstances, much benefit will be derived from the use of an ointment composed of three parts of the unguentum hydrargyri ammonio-chloridi, to one part of oil of almonds. This should be applied with a camel-hair brush, and well swept over the membrane of the nostril. A lotion of four grains of nitrate of silver to an ounce of distilled water, applied in the same manner, is also frequently of great service. But with such measures, careful attention to the general health should be combined.

On several occasions I have seen much embarrassment caused during

the operation for fistula lachrymalis, by the difficulty of finding the orifice of the duct with a probe or style, after the sac has been opened and the knife withdrawn. This will be obviated by making the incision with a narrow-bladed knife, which should be passed into the mouth of the duct; a fine probe should then be slid along the blade into the duct, and the knife withdrawn. The probe will at once guide the style into the duct, and the operation be completed.

ON THE DISCUSSION RESPECTING CHLOROFORM,

IN THE ACADÉMIE DE MÉDECINE OF PARIS.

By JOHN SNOW, M.D.

THE original conclusions arrived at by the Commission appointed to investigate the fatal case at Boulogne, and the general question of the safety or danger of chloroform, were ultimately adopted by the Academy, with very slight alteration (as was shown in the abstract of the proceedings in the last number of this JOURNAL), but not till they had met with a very stout opposition, more particularly from MM. Blandin and Jules Guérin. With the first conclusion, which acquits chloroform of the death of M. Gorré's patient, I cannot agree, any more than these gentlemen, and a number of other speakers. The Commission commenced their investigation, with the assertion that chloroform always produces intoxication and insensibility before death; and their reporter, M. Malgaigne, adheres to their opinion to the end, in opposition to all contrary evidence, and even denies that chloroform can cause death by its direct action, and especially by poisoning.

Now the truth is, that the vapour, when inhaled of a certain strength, is just as sure to cause sudden death without premonitory intoxication or insensibility, as it is to cause its ordinary beneficial effect when inhaled of another strength, or to fail altogether of its desired action, if diluted beyond a certain point. I have several times made animals—small birds, mice, and rabbits—breathe air saturated with vapour of chloroform at the ordinary temperature of the atmosphere, and the consequence has always been, that after attempting for a few seconds to escape from the capacious jar in which they were inclosed, they suddenly exhibited signs of distress, and died without any interval of intoxication or insensibility, in periods varying from less than half a minute to a minute after their first exposure to the vapour. In these experiments, not more than one-sixth part of the air was displaced by the vapour diffused through the remainder. The vapour of chloroform never acts, as supposed by the Commission, by excluding the air, and so producing asphyxia. This is physically impossible. The same quantity of vapour of ether in the air causes a much slighter effect; and, of some vapours, a scarcely appreciable influence, even when the air is quite saturated with them. Chloroform acts by its narcotic properties alone; and when inhaled of the strength employed in the above experiments, it paralyzes the action of the heart at the same time as the respiratory movements.