decided benefit, if not complete cure. In the treatment of the various kinds of stridor, it is advisable, once having made our diagnosis, not to exhibit to the patient too much concern or alarm. In some of these cases the dyspnoea is really alarming, but any sign on our part that we consider the case very serious or very extraordinary tends to aggravate the symptoms. In looking over the records of cases, one finds that tracheotomy has been performed in cases of stridor that were in all probability hysterical, and yet the tube had to go on being worn indefinitely. When urgent and persistent dyspnoea exists, inhalation of chloroform, short of anaesthesia, will relieve the symptoms. Otherwise the treatment of hysterical stridor and hysterical cough must be mainly of that kind which is beneficial in other hysterical maladies. Relapses are apt to occur in all these motor affections of the vocal cords, and it is by a judicious employment of general treatment, both physical and moral, rather than by local or special treatment, that relapses can be effectually guarded against.

Wimpole-street, W.

EXCISION OF THE LACRYMAL GLAND IN CASES OF EPIPHORA IN WHICH SEVERE NERVOUS SHOCK ATTENDS ITS TREATMENT BY DILATATION.

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SURGERY is indebted to Percival Pott¹ for advising that stricture of the nasal duct should be submitted to the same principles of treatment as that of the urethra. But it was reserved for Bowman² (1851) to devise a method on which the principle enunciated by Pott could be carried into practice *per vias naturales*, and applied to the whole of the tract which constitutes the excretory tear canals. Bowman slit up the canaliculus, thereby making possible the introduction of silver sounds, or probes, of sufficient size and strength to combat strictures, even when rigid, and also certain diseased conditions of the lacrymal mucous membranes. Laforest had previously (1753) invented a probe for the treatment of stricture of the nasal duct, which he introduced through the nostril; this plan, when successful, fails to reach two common seats of stricture, and, as witnessed by the writer in the hands of the late Mr. Wm. Martin, is difficult of performance. A large number of cases of epiphora are successfully treated by Bowman's method, with and without the aid of other remedial agents. But there are some in which a full-sized probe can be easily passed, and where, after a prolonged and carefully conducted mechanical treatment, tears continue to collect and overflow on to the cheek. In some of these, I believe, we have to deal with a chronic oedematous or a flabby condition of the mucous membrane of the nasal duct. The canal readily yields to the pressure of the sound, and on its withdrawal again obstructs the passage. In certain chronic diseases of the cornea, the excretory canals are, on exploration, found free and apparently healthy, the lacrymation being due to irritation of the ophthalmic division of the fifth pair of nerves. The pain and nervous agitation attendant on the modern treatment of stricture of the tear canals vary much, according to the degree of susceptibility of the patient. Some are quite indifferent to the surgeon's proceedings; occasionally, the patient faints on every repetition of the operation. In others, such extreme prostration is prevented by the taking of a stimulating draught. In a recent case which came under my care, a lady of fifty years, of good general health and apparently passive temperament, who had suffered from epiphora of fourteen years' duration, although the process of dilatation was not attended by marked signs of distress, the nervous shock became so great that her health failed, and there was no alternative, in my judgment, but to suspend the mechanical treatment. As the patient expressed herself most anxious to be rid of her epiphora, which gave great discomfort, I proposed to excise the tear gland. This was carried out on the lines advised by Macnamara³ with complete success. In the cases

I have operated upon the incisions have united without supuration, and the cicatrix soon disappeared sufficiently to escape remark.

The object of this communication is to advise recourse to excision of the lacrymal gland when a serious amount of nervous shock attends Bowman's method. Up to the present the operation of excision has been confined, I believe, to instances of suppuration and dilatation of the lacrymal sac. Such may, according to my experience, be successfully treated by simpler methods, cases of caries being excepted.

Birmingham.

A CASE OF OBLIQUE AND DIRECT INGUINAL HERNIA ON THE SAME SIDE;

WITH REMARKS ON THE CONJOINED TENDON.

By HENRY RUTHERFURD, M.A., M.B., C.M. GLAS.

THE specimen which is the subject of the following remarks was obtained from the right side of a man aged fifty-seven, who died in the Western Infirmary of cancer of the liver. There was great enlargement of that organ and distension of the abdomen. It seems probable that this distension was concerned in the production of the herniæ. Some puckering about the internal orifices of both sacs, as well as the distance between the external and internal abdominal rings, and the incomplete character of the internal sac, seemed to point to the recent commencement of their process of formation; while, at the same time, the close connexion of the oblique sac with the cord suggested that this might have been originally the patent upper extremity of the processus vaginalis. The sac of the external hernia measured about four inches and a half in length from the deep or internal abdominal ring. It contained a loop of bowel, which slipped back into the abdomen on the scrotum being raised. The internal sac had slightly bulged out the structures lying in front of it, including the conjoined tendon; but in the collapsed state of the parts on the post-mortem table there was nothing to show its presence, as the parts were seen from without. From within, a protrusion about three-quarters of an inch in depth, and freely admitting the tip of the index finger, was seen running downwards, forwards, and somewhat inwards. Its sharp internal border was formed by a thickening, which was continued upwards on the abdominal wall, running towards the middle line, and which evidently represented the obliterated hypogastric artery. The deep epigastric artery was found in its usual situation immediately to the inside of the internal ring, making a slight curve towards the middle line, as if already somewhat dragged inwards by the neck of the oblique hernia.

The chief point of interest in the preparation was the demonstration which it afforded of the relation of the conjoined tendon to inguinal hernia. The tendon was found inserted not only into the linea alba, crest of the pubis, and commencement of the pectineal line, but into Poupart's ligament as far out as the deep or internal ring, and even beyond it, the outermost fibres curving outwards behind and beneath the cord and neck of the hernial sac. The outer border of the tendon presented a slight thickening, with a suggestion of muscular structure, which appearance, it is to be noted, was not due to a splitting of the fibres of origin of the internal oblique or transversalis, such as has been recorded.¹

My attention has been drawn to the inadequacy of the usual descriptions of the conjoined tendon by my friend Dr. John Yule Mackay, who has referred me to the observations of Braune of Leipsic on this subject. From these it would appear that the conditions observed in the present case are constant, that it is the conjoined tendon which defines and gives fixity to the deep or internal abdominal ring, and that therefore every direct or internal inguinal hernia carries in front of it or splits the conjoined tendon.

The importance of the conjoined tendon as a covering of direct hernia was long ago pointed out by Sir Astley Cooper.² Later, in his "Observations on Diseases of the Testis," he describes the insertion along Poupart's ligament, "beginning," he says, "almost immediately below the commence-

¹ Chirurgical Works, 1799, vol. i., p. 343.

² Manual of Diseases of the Eye.

³ Med. Chir. Trans., 1851, vol. xxiv., p. 337.

¹ Quain, seventh edition, vol. i., p. 1022. ² Lectures on Surgery, Lect. 28.