WHY DOES THE OPERATION FOR THE CURE OF STRABISMUS SOMETIMES FAIL?

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IN a former number of this JOURNAL (May 20th), I stated that many surgeons regarded the operation for strabismus as so uncertain, that they advised their patients not to submit to it. This opinion may be correct when the operation is undertaken by unpractised or unskilful hands; but, under opposite circumstances, it is far from the truth. Nevertheless, failures do sometimes occur, even in the hands of the most skilful; and the causes of these, I shall endeavour to point out.

It is necessary to premise, that confirmed strabismus may be due either to a shortened or hypertrophied condition of one of the recti muscles; or this may be combined with contraction of the conjunctiva and the subconjunctival tissue, and an adhesion of these to the sclerotic coat of the eye: the cure, therefore, will consist in the perfect division of these structures; while failure will generally result from their incomplete section. This is so obvious, that the mere allusion to it may be thought unnecessary; yet experience proves that of all the causes of failure, this is the most frequent.

Firstly: As regards division of the muscle, I have been witness to the following errors: the entire muscle has been left undivided, the thickened conjunctiva and subconjunctival tissue only having been cut through. This I saw happen to a child that had long suffered from strumous ophthalmia, and was affected with double convergent strabismus. The surgeon having, previous to the operation, boasted of his extensive experience and unflinching success in this branch of practice, proceeded to operate on both eyes; in one, the muscle escaped division altogether, in the other it was only partly cut through. The introductory remarks of the operator led me to expect a failure, and I was not disappointed. On seeing the child a few days afterwards, it squinted as badly as before. Again, the upper or lower margin of the muscle may escape division, or these parts may be cut through, and the centre left undivided. These shortcomings I have seen happen repeatedly, both in the subconjunctival and the ordinary methods of operating, whether done with the knife or the scissors. As respects division of the muscle with knives, on practising the operation on the dead subject, I found that M. Guérin's knife, which has a convex cutting edge, always divided the centre of the muscle, but was apt, without great care, to leave the margins undivided. Mr. Brooke's, on the contrary, which has a concave edge, insured the division of the latter, but sometimes left the former. For these reasons, I adopted a straight cutting edge in my knife, or one very slightly concave. But, irrespective of instruments or modes of operating, a portion of muscle will sometimes be left undivided, and thus mar the success of an operation. Hence the warning cannot be too frequently repeated, never to terminate it without a most careful search with the blunt hook in every direction, a warning the more necessary now that chloroform is so frequently given.

But, secondly, every fibre of the muscle may be divided, and the eye still retain its abnormal position, from inflammatory adhesions. Of this I have met with two kinds; the one yielding, and capable of extension or rupture, by persevering lateral movements of the eyes; the other short, strong, and unyielding, incapable of extension or rupture, and requiring division by the scissors or knife. To the former, are owing many of these cases of temporary failure or deferred success, which most ophthalmic surgeons must have met with; and some have succeeded in remedying, by fixing the eye by means of a ligature passed through the sclerotic end of the divided muscle. At the time of or immediately after the operation, these cases appear to be failures; but the eye subsequently rights itself, so that they ultimately turn out well; nevertheless, they have had considerable influence with many surgeons, in stamping the operation with a character of uncertainty.

A gentleman recently consulted me on account of a double convergent strabismus; he had previously seen other surgeons on the same subject, the majority of whom were adverse to operative proceedings. One frankly confessed he had never done the operation but twice, and never meant to do it again; for in one case he thought he had succeeded—in the other, he considered he had failed. But, eventually, this state of things was reversed; the case that he took to be a failure turned out to be a success, and what was at first a success, ultimately became a failure. This evidence of the uncertainty of the operation was not to be resisted, and the surgeon has ever

since been a staunch opponent of ocular tenotomy. With regard to the short strong adhesions, before alluded to, they are fortunately rare. An eye thus fixed can never be liberated by any other means than their division. A most remarkable example of this kind is the following.

G. F., aged 14, came under my care on July 25th, 1857, for congenital paralysis of the third pair of nerves of the right eye. As he was anxious that something should be done to improve his appearance, I determined, in the first place, to bring the cornea into a central position between the two canthi; and, as I apprehended there might be some difficulty in getting it and maintaining it there, from the paralysed condition of the internal rectus, I passed an aneurism needle armed with a ligature underneath the external rectus, and then tied the ligature firmly around the sclerotic end of the muscle before dividing the latter; this having been done, the ligature was brought across the root of the nose, and the eye pulled in the same direction; the intention being to bring the cornea a little inwards, and to fix it there by means of the ligature. This, however, was found to be impossible, as it could not, by any justifiable force, be brought so far; and to maintain it, even equidistant between the two canthi, strong traction was required. I therefore divided the conjunctiva freely upwards and downwards, intending, if necessary, to snip the outer margins of the upper and lower recti; but it was soon apparent that these offered no obstacle to the movements of the eye, and that the real cause of its fixity depended on a number of short, strong, fibrous bands, intimately adhering to the sclerotic coat, and looking so like that structure, that I was once or twice in doubt whether I was not really dividing it; these were situated behind the vertical axis of the eye, and would just admit the point of the blunt hook beneath them. After they were all divided, and not till then, the eye became freely moveable, and could be pulled completely inwards, the cornea was then brought into the desired position, and the ligature, being no longer required, was removed.

The existence of these bands, and their influence on the result of an operation, were first pointed out to the profession by Mr. Duffin, in 1841; but they seem to have been altogether ignored by modern ophthalmic surgeons, and, in place of their division, we have had substituted the clumsy expedient of passing a ligature around the sclerotic end of the divided muscle, and so pulling the eye into the position which the external rectus was competent to give it had they been divided. That such a proceeding sometimes succeeds, and the cause of its success I have already stated in a former part of this paper; but that it not unfrequently fails, all who have had recourse to it can testify.

In conclusion, should my readers wish for further evidence of the correctness of the views which I have advanced in this paper, or of the necessity of inculcating them afresh, they cannot do better than turn to page 531 of this JOURNAL for July 3rd, where they will find reported five cases of strabismus that were operated on by Mr. Solomon, of Birmingham, three only of which were perfectly successful.

[To be continued.]

Transactions of Branches.

SOUTH-EASTERN BRANCH.

A NEW METHOD OF RESUSCITATING STILL-BORN CHILDREN, AND OF RESTORING PERSONS APPARENTLY DROWNED OR DEAD.

By HENRY R. SILVESTER, B.A., M.D.Lond.

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IN the following paper, I purpose to describe a new method of treating apnoea, and of inducing respiratory movements, by means of which air may be drawn into the lungs of the asphyxiated person without the employment of any apparatus. The process is, moreover, of universal application; it is easy of performance, entirely in harmony with that of Nature, and does not prevent or supersede the use of those means in which much confidence has hitherto been placed. The subject is one of deep practical and physiological importance, and is of direct personal interest to every individual, since no one can claim for himself or his family security from the dangers against which this method proposes a remedy.

Apnoea, or suspended respiration, may be the result of drown-