A CLINICAL LECTURE ON THE RHINOPLASTIC OPERATION.

Delivered in the Meath Hospital and Co. Dublin Infirmary,

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OF the plastic operations in surgery, those designed for the restoration of a nose partially or completely lost are probably the least popular with operating surgeons. This doubtless is due to the fact that satisfactory results are so seldom found possible of attainment, even by surgeons of some experience and reputed dexterity. When, however, the cases selected are suitable, and the necessary ingenuity in design and skill in execution on the part of the operator are available, then such procedures are to be commended and should be adopted.

The conditions indicating the particular form of rhinoplastic operation to perform are so various that it is hard, indeed impossible, to indicate in any comprehensive or exhaustive way the rules that should guide us in carrying out the measure. Among these, however, the following may be suggested. No operation of the kind should be undertaken so long as there is evidence of the disease producing the deformity being in a condition of any activity, however slight; the raw surfaces for the reception of the flap from the forehead, or from whatever situation it be taken, should be as narrow as possible; and when the frontal flap is selected, the pyriform design of Dieffenbach should be adopted. A period of three weeks should elapse before division of the pedicle, and when the skin covering the collapsed tissues is healthy it should not be completely removed, but utilised to give greater support and elevation to the new nose. This should be done either by the methods recommended by Thiersch, Keegan, Treves, and Woods. In the latter methods the flap, triangular in shape, with its apex above and base below, should be left attached below and reversed, so that the skin surface should line the roof of the anterior portion of the nasal fossa. In Thiersch's method two longitudinal skin flaps are taken from each side of the edge of the gap to be closed. These flaps are then turned inwards, and united in the mesial line. The integumentary surfaces of these flaps then line the roof of the nasal fossa, and on the raw surfaces, turned outwards, the frontal flap is laid. The additional thickness of the soft tissues obtained by the apposition of the frontal and nasal flaps largely diminishes the chances of subsequent flattening or falling in of the new nose. The nasal processes of the superior maxilla, provided they are healthy, may be utilised by v. Langenbeck's method, and thus give additional support to the nose, and in cases where the ossa nasi are healthy, and the columella remains free from disease, the procedure described in the second case, which I shall detail later on, is indicated.

Some surgeons, among others, I believe the late Professor Volkmann, have expressed themselves opposed to efforts being made to form a columella. In this view I cannot concur, as the formation of one taken from the frontal flap or from the upper lip, not only is an improvement æsthetically, but also must to a great extent counteract the tendency to falling in or flattening of the new organ.

In some cases the employment of temporary supports for maintaining the elevation of the new nose, and which may be made of ivory, silver, or glass can be employed with advantage, and fine carefully sterilised silk is the most appropriate material to employ for the sutures.

In connection with the rhinoplastic operation no one has done better work of late years than the late Mr. John Hamilton of Dublin. In his memoir on the subject will be found not only a long and valuable series of cases successfully operated on by him, but also many interesting historical details connected with the procedure. We learn, for example, that a Sicilian surgeon named Brancas in 1442, and in Italy a Calabrian surgeon named Vincent Vianneus, performed rhinoplastic operations, adopting the method which was sub-

sequently known as the Taliacotian operation. These procedures are mentioned in the works of Vesalius and Ambroise Paré. The latter illustrious surgeon, in his great work on surgery gives in quaint and picturesque language the particulars of a case under his observation that was operated on by a "surgeon of Italie," whose name, oddly enough, is suppressed by the author. He observes, "A younger brother of the familie of St. Thoan being weary of a silver nose, which, being artificially made, he had worn in the place of his nose that was cut off, went to this Chirurgical into Italie, and by the means of the fore-named practice he recovered a nose of flesh againe to the great admiration of all those that knew him before. This thing truly is possible to be done but it is verie difficult both to the patient suffering and to the Chirurgical working. For that the flesh that is taken out of the arme is not of the like temperature as the flesh of the nose is, also the holes of the restored nose cannot bee made as the were before."

The reason for Taliacotius's name being associated with this operation, of which, as has been pointed out, he was not the originator, is doubtless owing, as stated by Mr. Hamilton, to the publication in Venice in 1597 of his treatise *De curtorum Chirurgia sive de aurium et narium defectu per insitionem arte hactenus ignotâ sarciendo*. This publication took place forty years after his death. Although a case is recorded by Hildanus in which the operation was successfully performed by a surgeon named Griffonius, we may say that with the death of Taliacotius the operation was for a long time practically abandoned. Still cases occasionally occur in which the operation should be performed in preference to the Indian rhinoplastic or any of its modifications. Such cases as, for example, the one operated on and published by the President of the College of Surgeons, Sir William MacCormac,² and a case I operated on some years ago in the Richmond Hospital, and published,³ in both of which the results were not only encouraging but eminently satisfactory. It must be admitted, however, that the cases in which this operation is indicated are very rare.

It is with the so-called Indian rhinoplastic operation, introduced into England by Carpie in 1803, who published a work on the subject in 1816, that operating surgeons are chiefly interested, and it is to this operation, or a modification of it, that I wish more particularly to draw your attention to-day. Since the publication of Carpie's monograph, however, a good many modifications and improvements have been suggested and practised; for example, the Langenbeck-Ollier methods, in which, by periosteal transplantation, efforts are made to obtain firm support of the flap by osteogenesis. Also Langenbeck's osteo-periosteal method of partial detachment of the nasal processes of the superior maxilla, the displacement of these forwards so as to form osseous buttresses for the support of the frontal flap, to the lower portion of which the periosteal covering was carefully retained, in the hope that a re-formation of bone in the situation of the destroyed nasal bones might take place. Other methods, such as Professor Syme's, should also be mentioned, which in certain cases are more likely to be attended with satisfactory results than the Indian rhinoplastic method or any of its modifications. These cases are, however, exceptional, and, in truth, mainly applicable to those in which the normal osseous supports have not been wholly obliterated.

The first case I should wish to bring under your notice is that of J. M., aged 27, who was recently in the Meath Hospital under my care, on account of the sad deformity of her face, of which a fair estimate can be formed from the accompanying illustrations from photographs of the patient before and after the operation made by Mr. Prescott, late Clinical Clerk in the Meath Hospital. In all other respects the patient appeared healthy and strong and there was no evidence from family history or otherwise of there being any tuberculous element in the case. I regarded it as having a specific origin. There was no active disease progressing and the soft structures over the perfectly flattened nose were apparently healthy. Owing to the exceptionally frightful deformity present in this case the condition of the patient was in truth a sad one. She felt compelled to wear under a thick veil a black silk mask, being not unnaturally sensitive about her deformity being seen, and under these circumstances was unable to obtain employment and earn a livelihood. The patient was accordingly admitted

into hospital with the object of getting a plastic operation performed. The procedure adopted was in most respects similar to one described and illustrated in Mr. Treves's *Operative*

J. M. Before operation.

Surgery, and which has been strongly advocated by Mr. R. Woods, who has published an excellent account of the method and who, at my request, kindly inspected the case and made some ingenious suggestions as to the *modus operandi*. The main feature of this procedure is the preservation and reversion of the flap of skin occupying or covering the situation of the destroyed nasal bones. The skin flap, triangular in shape, with its apex above and base below, was turned downwards so that the integumentary surface formed the roof of the anterior portion of the nasal fossa and the raw surface looked forwards. A pyriform-shaped flap similar to that designed

J. M. After operation.

and recommended by Dieffenbach was then dissected from the forehead, care being taken not to involve the deeper structures covering the frontal bone, a precaution which I believe accounts for the unusually small amount of cicatricial deformity which resulted from the operation. The frontal flap, taken somewhat on the left side of the mesial line, was then brought down and inverted by gentle torsion of its pedicle. The two raw surfaces of the triangular nasal flap and the frontal one were then brought into contact, and the edges at each side united by horsehair sutures. The outer portions of the lower part of the pyriform-shaped flap at each side of the columella were then

turned back and secured by sutures, and the square-shaped portions between them designed for the columella was doubled on itself, bringing its raw surface into contact. These were then secured by sutures and pushed back, and the raw surfaces of its edges below brought into contact with the upper edge of the lip, which had been vivified for its reception. These edges were then sutured by fine silk. In order to assist in preventing flattening of the new nose, I placed two small leaden plates, kindly furnished to me by Mr. Woods, one on each side of the nose, and approximated them by passing silk sutures horizontally through the tissues of the nose and fastening them to the plates. This manoeuvre forced the intervening tissues forwards and gave elevation to the new nose. These plates and sutures were left undisturbed for three days and then removed. The advantages of utilising a double flap appear to be twofold. First, there is less risk of contraction from the inner surface of the new nose being lined by skin; and, secondly, the chances of collapse and flattening of the tissues are diminished, owing to the additional thickness of the tissues obtained by the double flap.

Had the nasal maxillary processes been available I should have made the attempt, suggested by v. Langenbeck, to form an osseous bridge on which the new flap might rest and be supported. But unfortunately on one side the process was completely destroyed by disease and on the other it was much hypertrophied. It was not possible, therefore, to make an attempt to carry out this ingenious idea, one which I do not think has as yet received the attention of operating surgeons which it merits.

The illustration, taken from a photograph eight months after the operation, or series of operations, I performed in this case, indicates a result which may be considered satisfactory. Since the patient left the hospital she was for a considerable time employed as a servant in the Meath Hospital Convalescent Home at Bray, co. Wicklow.

In the next case a very different and, I am inclined to think, a novel method of operating was adopted, and with a result as favourable as in the preceding case.

J. B., aged 19, was admitted into the Meath Hospital on June 19th, 1894. He had suffered from his childhood from recurring attacks of lupoid ulceration affecting chiefly the anterior portion of the septum and extremity of the nose. He had been treated in various hospitals with the not unsatisfactory results of checking the progress of the disease, and bringing it to a quiescent condition. In consequence of the partial

J. B. Before operation.

loss of the nose, however, the disfigurement was one which gave the patient much distress, and accordingly he came to hospital for the purpose of obtaining a restoration of portion of the organ which had been destroyed. All activity in the disease having subsided, and the deformity being so much

localised, I felt that neither the Indian rhinoplastic or any of its modifications were indicated. Still less was the Taliacotian method.

The following procedure I adopted: The columella having happily remained unaffected, I was saved the trouble of making one. I commenced by making an incision a little to the inside of the right ala, and carried it across the extremity of the nose to a corresponding point on the left side. The incision extended as high up as the point corresponding to the lower margins of the nasal bones. This incision was passed through all the tissues into the anterior nares. We

J. B. Before operation

had thus a bridge of tissue attached at each side, and with the columella separated from the vomer and nasal bones. This bridge was then drawn downwards and kept in that position by a small ivory buttress, which separated it from the tissues of the upper part of the nose. The gap thus formed was somewhat lozenge-shaped, and to fill up this I dissected two triangular-shaped flaps, one from each side of

J. B. After operation.

the cheeks, with the bases above and the apices below, and these flaps were then turned downwards and inwards and their bases brought together in the middle line and carefully united by two or three points of suture of fine, carefully-asepticised silk. The upper margins of the transplanted flaps were also carefully sutured to the tissues above and the lower margins

to the bridge. The ivory buttress was left in for three days, until the edges of the flaps had become firmly united to the tissues above and below. The vitality of the triangular transplanted flaps was throughout satisfactory. In order to obliterate the defects caused by the detachment and transplantation of the flaps I performed a sliding plastic operation, which had the desired effect, and little or no cicatricial deformity on either cheek remained.

The cases applicable for such a procedure as that just described are, of course, exceptional; but in such a one it has, I think, great advantages over any of those ordinarily performed. The Indian rhinoplastic and its modifications are long and tedious in their performance and uncertain in their results; and the same may be said of the Taliacotian operation. These objections do not apply to the method described in the above case, which was done in a comparatively short space of time, was unattended with hæmorrhage of any moment, or the subsequent development of a disfiguring cicatrix.

REFERENCES.

¹ *The Works of that famous Chirurgion Ambroise Parey*, London, 1649, p. 758. ² *Clinical Society's Transactions*, vol. x, 1877, p. 1181. ³ *Dublin Journal of Medical Science*, May, 1882.

THE LETTSOMIAN LECTURES

ON

SOME CLINICAL ASPECTS OF
GRANULAR KIDNEY.

Delivered before the Medical Society of London.

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LECTURE I.

THE invitation to deliver the Lettsomian Lectures before this ancient Society is a compliment which no one, and least of all myself, can fail to appreciate. It is one which has been accepted in times past with full appreciation of the honour by many of the most distinguished members of the profession. The great names upon that list have aroused in me the natural fear that my ability may prove unequal to the task, yet I trust that with their example and your indulgence I may succeed in making the present Lectures not unworthy altogether of a place in the series.

In choosing granular kidney, I was guided by the wish to select a subject which should be of practical importance, and therefore of general interest, and at the same time one upon which I could speak from personal experience.

Granular kidney is a disease of great importance on account of its frequency, a frequency which is by no means adequately recognised. *Post mortem* it is often discovered when not suspected. It is often in itself the cause of death, even of sudden death, and it often explains why death has happened in other diseases which otherwise might not have proved fatal. *During life* it is often discovered unexpectedly if looked for; it is often overlooked if not suspected, and it often explains a case which has been a puzzle until granular kidney gave the key.

The general *post-mortem* frequency of granular kidney ranges from 11.8 to 18 per cent., so that it is a very common condition.

Thus the *post-mortem* records at St. Bartholomew's Hospital for a period of five years gives 13.2 per cent. (219 cases of granular kidney in 1,662 necropsies, children being excluded from the calculation).¹ Of these, 132 were in males and 84 in females, showing the frequency in males to be one third greater than that in females. Goodhart's statistics at Guy's yield 15 per cent.; Saundby's, at the Birmingham General Hospital, 18 per cent.

Mahomed's Table showing Relative Frequency of Granular Kidneys to Healthy Kidneys at different Age-Periods based on 336 Cases, of which 57 were above 50.

Ages.	Granular Kidney found in
10-20 ..	2.3 per cent
30 ...	3.0 "
40 ...	12.0 "
50 ...	38.5 "
60 ...	43.0 "
Above 60 ...	50.0 "