The æsthetic treatment of hare-lip : with a description of a new operation for the more scientific remedy of this deformity / by Maurice Henry Collis.

Dr Dyce
from the author

THE ÆSTHETIC TREATMENT OF HARE-LIP,

WITH A

DESCRIPTION OF A NEW OPERATION

FOR THE MORE

SCIENTIFIC REMEDY OF THIS DEFORMITY.

BY

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THE

ÆSTHETIC TREATMENT OF HARE-LIP.

[Being the substance of a Paper communicated to the Obstetrical Society, December, 1866.]

THE natural condition of the upper lip in its perfect state is as follows:—

Its free margin has the waved outline to which the name of "Cupid's Bow" is given. Its depth is greatest in the centre. Its margin is connected with the inner margin of each nostril by a curved line. These curves, and those of the free margin, correspond, or have a relation to one another; thus, if the lip be full and freely curved, the lines which pass up to the nostrils will likewise be freely curved, and will include a larger portion of lip than when the margin of the lip is almost straight. In this latter case, the lines referred to are also straight or nearly so. The upper lip may, therefore, be fairly divided into a central and two lateral portions, joined by curved lines (Fig. 1).

Fig. 1.

The fissures of hare-lip always correspond to this division.

In the double hare-lip, the fissures cut off the central portion along the curved lines referred to. In the single hare-lip, the central portion remains attached to one side and detached from the other, the curved line being still traceable on the larger portion.

These are anatomical facts of some importance, both in a surgical

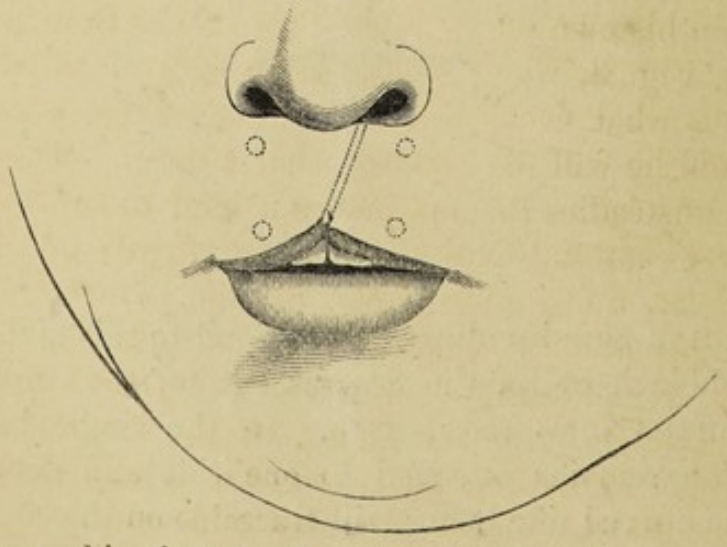
and *æsthetic* point of view. Almost from the time of my student days I have considered the ordinary operation for hare-lip to be deficient in a due regard to the natural condition of parts, and I have followed with interest many efforts made by distinguished surgeons to improve it. Let me first state wherein it is deficient.

The ordinary directions are—first, to divide the frena, true and false, to the fullest extent. Secondly, with knife or scissors to pare the edges, cutting away the rounded corners freely. Some surgeons make these incisions straight, others make them curved with the concavities facing each other.

The evil of dividing the true frenum is that the lip is thrown out of gear, and one of the best means of bringing the distorted nostril into its proper place is sacrificed.

The incisions, whether straight or concave, must result in a straight cicatrix, whereas there can be no doubt that the cicatrix ought, if possible, to follow the curved line which runs, in the natural condition, from the nostril to the margin of the lip. Further, the loss of substance along the margin of the lip is considerable by this method. Hence the resulting lip has a tight margin, which is drawn up by the gradual contraction of the cicatrix, so that ultimately its outline, instead of a graceful wavy line is made up of two straight lines, which at their point of junction allow a tooth to be seen. The contraction of the cicatrix not only tucks up the lip at that point, but it also renders the lip thin along the line of cicatrix, whereas it ought to be thicker and more full along that line than elsewhere. In fact, in place of a curved ridge, we get by the ordinary operation a short depressed straight line, with a lip tucked up in or near the centre (Fig. 2).

Fig. 2.



Such are my objections to the common operation.

One of these is remedied by the operation known as Malgaigne's or Sédillot's, which I learned twenty-one years ago from a fine old English surgeon, the late Samuel Smith, of Leeds. He told me then that he had devised it some twenty or thirty years previously. Whether he ever published it I do not know. This improvement consists in reserving the lower portion of the parings at each side, and turning them downwards so as to form a prominence along the margin. This manifest improvement gave me the first idea of my operation. For some years I was content with it, but by degrees I have added one thing and another to it until I have brought it to a point of perfection, that I am not afraid to challenge attention to.

The rules for my operation are:—

1st. Never to interfere with the true frenum. It is not only unnecessary to divide it, but most pernicious.

2nd. Freely to divide all false frena, and if the alar cartilage is misplaced, let the incisions separate it freely so that it may be fairly drawn into its proper place.

3rd. Never to attempt to close the lip so long as the inter-maxillary bone is misplaced to any extent.

4th. To preserve and utilize all the parings. They are all wanted, as they all have their proper place; to this point I will revert at length.

5th. To use interrupted sutures, and discard all pins or needles as far as possible.

6th. To leave the line of union exposed, using no dressings or plasters for some days.

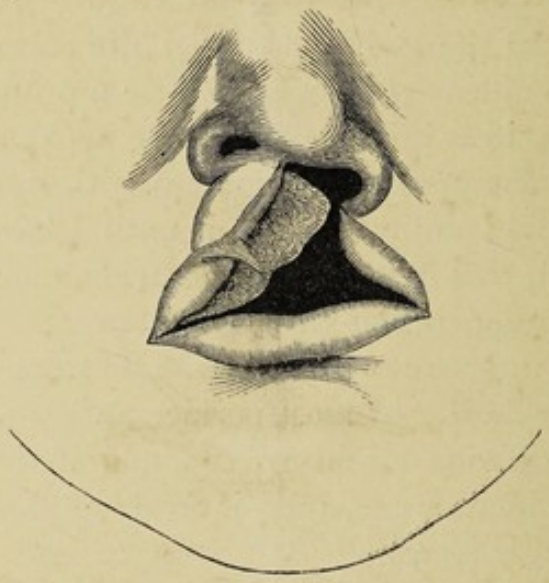
And now to justify these rules:—

1. I never divide the true frenum. Its obvious use is to steady the lip, to prevent muscular action from drawing the centre of the lip away from its proper place. Let any one with his finger or tongue try on his own lip what the uses of the frenum are, or cast a glance on Fig. 3, which represents a case of hare-lip with the soft parts somewhat everted, and the intermaxillary portion much misplaced, and he will see at once what I mean. The division of the frenum unsteadies the lip, makes it tend to run into a string, and, in many cases, leaves a permanent fistula into the nostril. It is, moreover, quite unnecessary, as the parts can be brought into perfect apposition without meddling with it.

2. I freely divide all adhesions or false frena, and I subcutaneously separate all attachments of the ala nasi to the bone which interfere with the proper formation of the nostril. The advantages of this are so obvious that I need not dilate upon them.

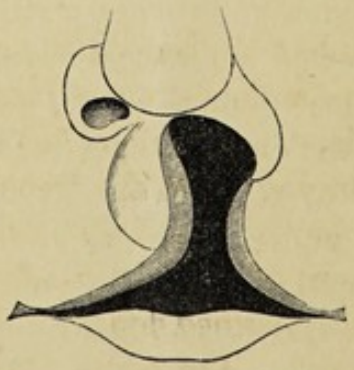
3. Before paring the margins, the intermaxillary bone should be placed exactly in the centre, if not so already. Where there

Fig. 3.



is fissure of the hard palate there is always this displacement. I generally manage this part of the operation by detaching the bone on the sound side by means of a narrow gouge. A strong forceps, with the blades protected with chamois leather, will then force the bone into position. As the nutrient vessels run along the mucous membrane, and chiefly on the inner surface, the gouge is the best instrument for loosening the bone. It may be used freely in this subcutaneous or submucous fashion; in fact, the more freely the bone is loosened the more easy is it to get it into position. The instrument has the advantage of being efficient and

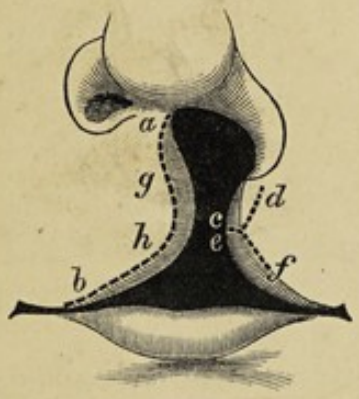
Fig. 4.



simple; no small recommendations now-a-days. The parts will then present the appearance seen in Fig. 4.

4. I never throw away a particle of the parings. My incisions are made so as to make every fragment of them useful. On one side they are preserved to make the lip thick, and on the other to increase its depth. The method is somewhat complex, but a reference to Fig. 5 will make it intelligible. When dealing with single

Fig. 5.

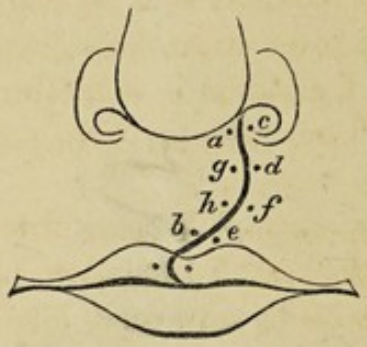


hare-lip, I take the larger portion, that which includes the middle bit, and pare it freely from the nostril round the margin, from *a* to *b*, until the point of the knife comes opposite the frenum. This incision goes through all the tissues of the lip except the mucous membrane. It follows the curved line of the margin of the fissure, and leaves a long wound, which is curved towards the fissure. The flap is left loose, and attached only by mucous membrane. On the other or smaller side of the lip, where we generally find the tissues thin, especially as we approach the nostril, the treatment is quite different. I transfix the lip at *d*, close to the nostril, and carrying the knife along parallel to the margin, as far as *f*, I detach a moderately broad flap, which I leave adherent above to the ala nasi, and below to the free margin of the lip well beyond or external to the rounded angle at the fissure.

This flap, which (unlike the one at the opposite side) comprises all the tissues of the lip, is now divided into two at its centre (*c e*). I thus get two loose flaps, a superior (*c d*) attached to the ala nasi, and an inferior (*e f*) hanging on to the free margin of the lip. The loose end of the upper flap is turned up so that its raw surface faces the wound in the opposite side of the fissure, and the loose end of the lower flap is similarly turned down. The point *c* is brought up to *a* and fastened there. The point *e* is brought down to *b* and fastened there; *d* is brought across to *g*, and *f* to *h*. I have thus got on the small side of the lip a wound as extensive as that on the

larger side. The upper flap completes the outline of the nostril. The lower one supplements the outline of the free margin of the lip. I thus get a lip nearly double in depth what I could possibly have got by the ordinary incisions (Fig. 6). I shall revert to the treatment of double hare-lip further on.

Fig. 6.



5. I use, as a rule, sutures of horse-hair, as being less cutting than wire and less irritating than silk or thread. Pins, except very fine insect pins, I have discarded. Even these I use but rarely. A well-tied suture holds the parts together with sufficient firmness. It can be removed at any time, whereas the pin must remain until it becomes loosened in its bed by suppuration; hence the mark of a suture is trifling compared with that left by a needle or pin. The spot which requires a pin most frequently is the ala of the nostril. It tends to revert to its old position with more force than the lip, and it often needs the stronger pull of a pin.

I generally insert the upper suture first, then the one close to the line of junction of the red and white, then the two invervening sutures, in the order that seems most suitable in each case. Sometimes I have inserted a suture on the inner or mucous surface of the lip. Sometimes this is not necessary. Generally I put a fine suture just along the free margin to keep the lower flap in its new bed until it contracts adhesion there.

The sutures are removed, one after another, those near the margin first, the upper two last. As to time of removal much will depend on the age of the child, and on the firmness of its flesh. Thus in a strong child a suture may be left three or four days, while in one more delicate it may have to be removed in forty-eight hours. Sutures should never be left long enough to ulcerate.

6. By this treatment of the sutures, plasters and dressings are dispensed with until some days have elapsed. They are applied only when the sutures are removed, and with a view to prevent the lip

from thinning. I generally find that all the wound heals by first intention, and the presence of plasters rather interferes with this process, at least so long as the sutures are left. When plasters are used they have to be removed when we wish to inspect the lip, and their removal disturbs the delicate process of union. By leaving the lip uncovered we can watch the progress of the cure, and it is easy to apply a strap at any moment if it be really needed. The use of Hainsby's truss will, in most cases, make it quite unnecessary to use plasters of any kind. Collodion is sometimes useful, but it should be made very thick. The ether in thin collodion acts injuriously on the healing process.

As to the age for operating, I have done so successfully in a child under three weeks, and I have seen others of twice as many months in whom I refused to operate. The question is entirely one of the strength of the child, and the firmness of its flesh.

With regard to complicated double hare-lip (Fig. 7), the first point to be attended to is, in like manner, the strength of the

Fig. 7.

child, which, as a rule, is far below par. When, by careful feeding, this has been brought up to a proper state, the protruding inter-maxillary bone has first to be replaced. It should never, under

any circumstance, be removed. This is, in fact, so well established an axiom of surgery, that it need not be insisted on. It is not always easy to bring it into its proper site. There are three methods to choose from; one is to separate it completely from all bony attachments, and to leave it for a time pendulous, adherent only to the central portion of the lip. This is the best way when practicable. The second is to take a V-shaped piece out of the vomer. The third is a new method which I have tried, and which has the advantage of helping materially to lessen the gap in the palate. It consists in cutting off an oblique portion of the vomer along with the inter-maxillary bone. Whichever method is adopted, the bone is best left undisturbed for a few days after this stage of the operation. Nothing is more fatal to success in these cases than the effort to do too much at a time. A few drops of ether will sufficiently anesthetize the child to prevent its being frightened by repeated operations; success of the highest kind can only be obtained by doing the operation bit by bit. It is easy no doubt to conclude all at one sitting—but not to conclude all well. I therefore advise that, as a rule, the bone when detached in any of the above methods, should be left undisturbed for a few days before any attempt is made to push it back or retain it in its new position. Yet if it goes back easily, the remainder of the operation may be done at one sitting.

Fig. 8.

I treat the middle bit of skin as in simple hare-lip, paring its margin in a curved manner, and leaving the parings attached by the mucous membrane; the outer portions are treated exactly as in single hare-lip, and the sutures are practically the same. In double hare-lip they are best inserted, and tied from below upwards. The amount of the central portion which can be made to contribute to the lip, is never very great, and the strain on the upper portion of lip is often very considerable. In these cases the use of Mr. Hainsby's truss is of the greatest service.

It is surprising how beautifully the flaps, made after my method, fall into and fill up the places intended for them; how naturally the form of the nostrils is restored, and the curves of the lip (Fig. 8). The faithful woodcuts of Mr. Oldham show the perfection of outline, and the great increase in depth of the lip as contrasted with the results of the old operation.

In conclusion, I recommend this improvement in plastic surgery to the kind consideration of my professional brethren. I am satisfied that when tried it will be found a real advance in operative surgery, and one that all will confess was much needed in this department.

I shall give one case, out of many, as a sample of the results of my method of operating. It was further remarkable as an example of the ease with which fissures of the palate can be treated under chloroform. We have been in the habit, in Dublin, of using chloroform freely in all operations about the jaws, mouth, or fauces, and for at least three years I have done all my cleft palates under chloroform. It gives great facility to the operator, and is not dangerous to the patient, unless by culpable negligence. By means of it we can operate on infants and children. For my own part I prefer not to operate on the palate before the age of four or five years; the tender tissues of younger children scarcely bear the strain of sutures, or the preliminary manipulation with forceps, and raspatory. But from the fourth or fifth year there is no such objection, and, if practicable, the operation should not be deferred beyond that age. It suffices to chloroform the child deeply at first, and to let it come to a semi-conscious state. I have hitherto found children in this condition perfectly amenable. They seem to hear, and they obey our directions about the position of the head, the keeping of the mouth open, and the emptying of the mouth; and they do not feel either pain or discomfort. A few drops of chloroform, or chloroform and ether, now and then, will keep up this condition for any reason-

able length of time. The blood is either spit or sponged out, or quietly swallowed. I have never seen it get into the larynx, nor can it well do so, as it is guided away from it by folds of membrane leading from the epiglottis backwards. The fauces should be well sponged as the operation goes on, otherwise the blood may clot there, but there is no difficulty in doing so. A piece of elastic riband along the back of the neck with blunt hooks of double wire at either end will keep the mouth open, aided by the handle of a spatula or any roughened piece of wood as a gag between the teeth. I have operated seven times under chloroform, and my friend, Mr. Smyly, has also used it; we have never found any inconvenience from its use, and, in our opinion, it greatly facilitates the operation. The patient lies quietly on the operating table, and the surgeon standing at his right side is able to show the steps of the operation to the class as he goes along.

Case of Single Hare-Lip, with Cleft Palate and Displacement of the Intermaxillary Bone.—Pat Mulveagh, under five

Fig. 9.

years of age, was sent up to me from Virginia, in Co. Cavan. He had complete congenital fissure of the palate, extending through the alveoli, and complicated with hare-lip on the right