

Modified Incision For Orbicularis Oris Function Conservation In Intra Oral Lesions.

Dr. Mira Sen, F.R.C.S.
Dr. Asit Ranjan Dasgupta, M.S., M.Ch.
Dr. Meera Chatterjee, M.S., F.I.C.S.
Dr. Dipankar Chatterjee,
M.B.B.S., D.G.O.
Dr. N. Vani, M.B.B.S.
Dr. Amit Bhowmik, M.B.B.S.

KEY WORDS :

Oral sphincter, continuity.

ABSTRACT :

A new incision with a view to reduce vascular compromise, to have a better control of saliva, speech and mastication, in oral cancer surgery is described.

INTRODUCTION :

Midline type lip-chin splitting incision is normally used. This leads to many disabilities postoperatively.

MATERIAL AND METHODS :

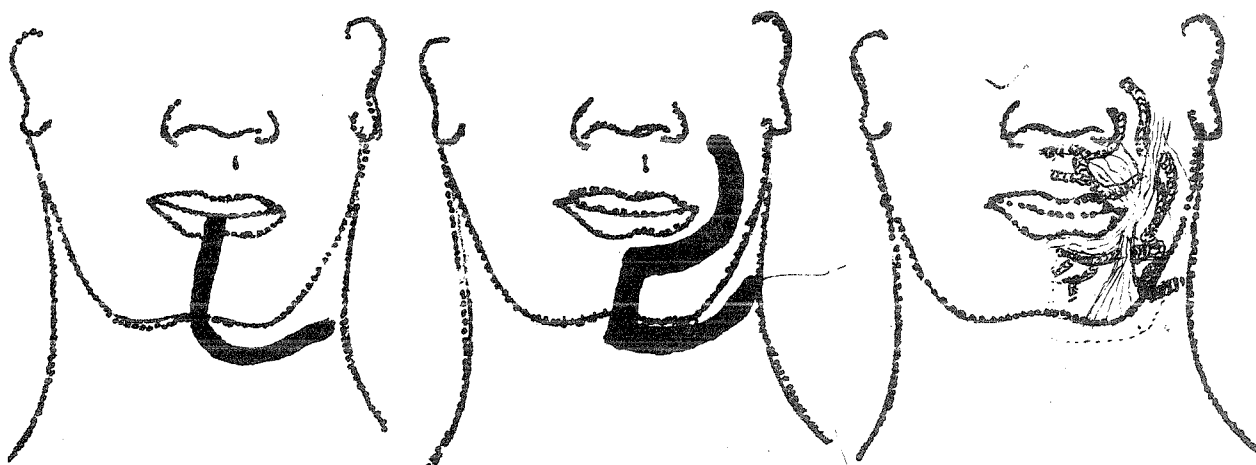
Eight cases of intra oral malignancy were operated by modifying the incision. And primary excision of lesion along with cervical block dissection was carried out by new modified incision as against the midline type lip chin splitting incision.

Purpose of this modification was

- i) to prevent complications resulting due to vascular compromise of the lower lip.
- ii) to have better salivary and masseteric control and
- ii) better speech.

Incision planned and executed was started two centimeters away at the angle of mouth, extending upwards upto nasolabial fold, downward upto midline over the chin-skin, keeping the same 2 cms. distance from mucocutaneous junction. This was then extended downward over the midline and then from under the mandible backwards.

incision is associated with block dissection of the neck glands the lower lip is subjected to devascularisation from two sources. First of all, lip splitting incision cuts off the vascular anastomosis of both the inferior labial arteries at the midline, jeopardizing the vascular supply of the lower lip, from the opposite side. Secondly, when facial artery is



Sketcher Showing

1. Commonly Used Lip Splitting Incision.
2. Modified Incision.
3. Superior and Inferior Labial Artery.

Photographs Showing Post-Operative Results

1. Case One
 - a) -Mouth Closed
 - b) Adequate Mouth Opening
2. Case Two
3. Case Three

DISCUSSION :

Midline lower lip splitting incision, to gain intra oral access in carcinoma of the oral cavity is well know. But on different occasions when this

ligated, at the neck while doing the cervical dissection, the lower lip of the affected side is again subjected to devascularisation. Due to this bilateral ischaemia the lower lip of the affected side shows ischaemic changes. As a result there is problem of drooling of saliva and slurring of speech post operatively.

Moreover, slightest breakdown of suture line at lip margin can allow saliva to enter the wound, leading to complete breakdown of the suture line. It

has been reported by many authors that lip splitting incision during healing may contract at its length producing a bow-string effect at the concavity of the lower lip. If facial nerve is sacrificed during the tumour operation, post operative drooling is further accentuated.

To avoid all above complications this modification has been made.

CONCLUSION :

Lips get their blood supply from the facial arteries through superior and inferior labial arteries. There is a significant anastomosis between superior and inferior labial arteries, at the angle of the mouth. These vessels together with those of opposite side encircle the mouth between orbicularis oris muscle and submucosa of the lip, making a complete vascular arcade around both the lips. Taking advantage of this anatomical vascular arcade bipedical lip flap has been designed. Advantages seen in our series, in early post operative period, during follow ups have confirmed the superiority of this modification.

REFERENCES :

1. E. Neville Gleve; Operative Surgery Head and neck. Part - II Page 600.
2. Charles Rob and Bodney Smith, 3rd edition 1981. Operative Surgery, Head and neck. Part-II Page 532. Charles Rob and Rodney Smith, 3rd edition, 1981.

AUTHOR'S NAME AND ADDRESS :

1. Dr. Mira Sen, F.R.C.S. Professor and Head
2. Dr. Asit Ranjan Dasgupta, M.S., M.Ch., Associate Professor (Plastic)
3. Dr. Meera Chatterjee, M.S., FICS, R.M.O. Cum Clinical Tutor (Plastic)
4. Dr. Dipankar Chatterjee, M.B.B.S., D.G.O., Medical Officer (Plastic)
5. Dr. N. Vani, M.B.B.S., Resident (Plastic Surgery)
6. Dr. Amit Bhowmik, M.B.B.S., Resident (Plastic Surgery)

The Plastic Unit, Department of Surgery,
Calcutta National Medical College and Hospital, 24,
Gorachand Road, Calcutta 14.