SURGICAL TREATMENT IN LOWER LIP CANCER. RECONSTRUCTION POSSIBILITIES

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Abstract: *Cancer treatment has encountered major shifts in the past years, through the encouragement of introducing new technology mostly in the radiotherapy area. This allowed patients to have access to better surgical treatment with optimal esthetic and functional outcome that ensured them a better life quality after surgery. Classic surgical methods were improved for better outcome.*

Cuvinte cheie: *cancer de buză, neoplasm oral, plastia buzei*

Rezumat: *Tratamentul cancerului a înregistrat o schimbare de direcție în ultimele decade, astfel a fost introdus tratamentul multimodal, radio și chimioterapia ce încorporează noi aspecte tehnologice moderne. Îmbunătățirea tratamentului chirurgical, cu o refacere fizionomică și funcțională foarte bună a permis pacienților o calitate a vieții superioară. Totodată tehnicile clasice au fost îmbunătățite pentru a fi asigurat un prognostic cât mai mare postoperator.*

Oral cancer is considered to be the 6th major cause of death in the world (1), though little is known to the public and even to the medical staff.

Lip cancer is the most common neoplasia in the cervical and maxillofacial region. In a retrospective study conducted at the Maxillofacial Surgery Department in Timişoara on a period of 10 years, it was found that lip cancer had a rate of almost 20% from all the tumours that are malignant or have a malignization potential and also a rate of 39,7% from all neoplasia in the cervicofacial region.(2)

In a study concerning almost 1026 malignant tumours, at the Maxillofacial Surgery Department in Bucharest, a similar rate of 20% was found.(3)

Lower lip seems to be mostly affected by this pathology (85-95%), compared to upper lip (2-7%) and lip commissure (2-4%).(4)

Surgical treatment remains one of the necessary therapeutic methods in the management of oral cancer including lip cancer.

The major objectives of surgical treatment are: rapid tissue healing, a high survival rate, ensuring a better life quality than prior the surgery through functional and psychological comfort. The latter helps to the faster reinsertion of the patient in society and family.

Lip cancer treatment focuses on the primary lesions, the cervical lymph nodes, the bone associated lesions, local or distanced soft tissue involvement.

If the tumour is considered suitable for surgery, surgical therapy together with neck dissection for the affected lymph nodes is the most effective method for the management of lip cancer. One of the major advantages of radical surgery is the possibility of completely removing the tumour and it allows the assessment of the quality of the free margin through the help of extemporaneous histology test.

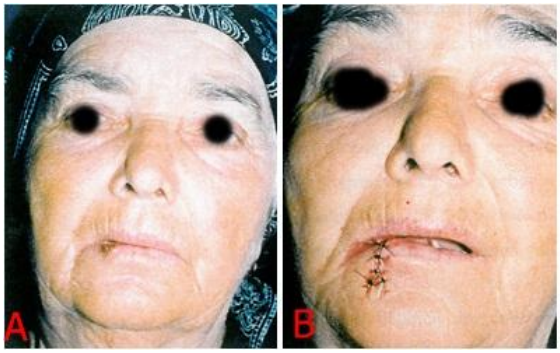
Regarding the size of the defect after tumour excision, we can classify different types of reconstruction in: defect up to 1/3 of lip, from 1/3 to ½ a lip, and defects that surpass ½ a lip.(5)

In an early stage when the lesion is small, a *vermilionectomy* can be performed.

Other indications for vermilionectomy are the removal of leukoplakia or eritroplakia. This results in a good primary suture usually with the help of an anterior advanced labial mucosa flap. The sliding path of the flap must be situated between the orbicularis muscle and the submucous layers. A disadvantage of this technique could be the occurrence of hypoesthesia in the lip region.

When the lesion is more invasive, vermilionectomy is contraindicated, and usually a V (figure no. 1) or W (figure no. 2) excision is performed.

Figure no. 1. A. Right side lower lip carcinoma; B. *V* plastic reconstruction



The result has a good functional and esthetic outcome. Suture is done in 3 layers. Within one year postoperatorily, muscle tonus and elasticity is similar to the conditions prior to the surgery. The resulting microstoma is usually treated with miogymnastics. Aesthetics is usually higher when the defect is confined to the mucosa.

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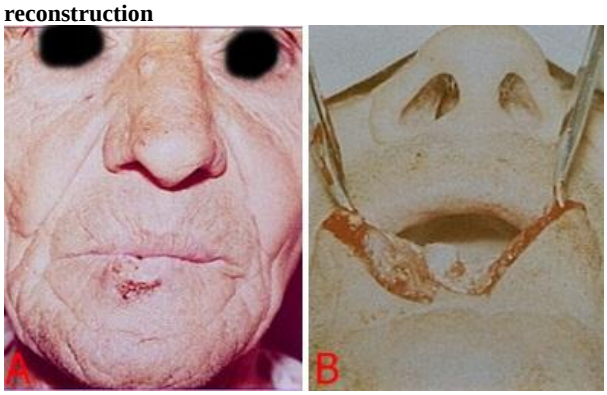
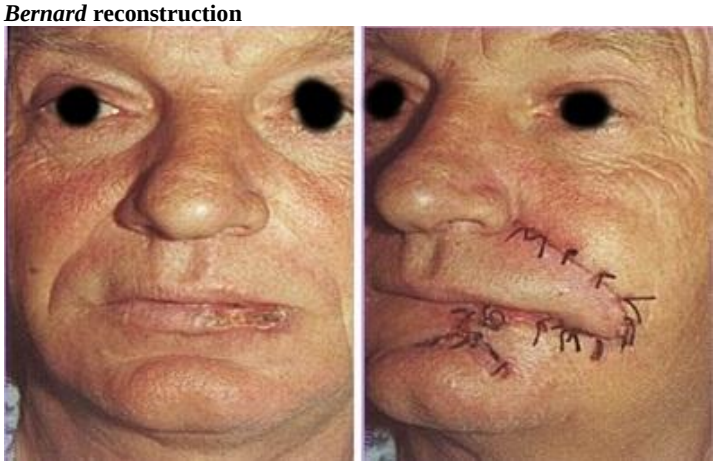
Figure no. 2. A. Median lower lip carcinoma; B. *W* plastic reconstruction



In tumours that surpass 1/3 of the lip, *Karapandzic* technique is widely used. This technique is based on the bilateral advancement of flaps irrigated by the facial artery. The technique is suited for upper and lower lip. One of the most important disadvantages is that it leads to microstoma.(6)

When the tutor is quite extensive, one of the most frequently used techniques is the *Camille Bernard* reconstruction (figure no. 3).

Figure no. 3. A. Left side lower lip carcinoma; B. *Camille Bernard* reconstruction



It can be used for one side or bilaterally. The most important feature is the excision of small triangles of tissue from the cheek, and it relies on the *fan flap* principle. The flaps are advanced and the results are satisfactory regarding the vermilion. The incisions are hidden in the natural skin folds and the motor innervations remains intact.

Conclusions:

In time, numerous reconstruction techniques have been described for the treatment of lip cancer, but some of their results remain uncertain. Nevertheless, they strive to accomplish one very important goal: social rehabilitation of the patient, prolonging his life expectancy.

Maxillofacial surgeons together with plastic surgeons are constantly looking for newer methods to reconstruct the lips of an oncologic patient, more accurately. Surgery remains the best treatment for lip malignant neoplasms, despite the major breakthroughs in medical technology.

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