

# Epidemiological, Clinical, Paracinical, and Therapeutic Profile of Cancer of The Lip of the Radiotherapy Department of the University Hospital Center of Fez: About 20 Cases

Fez Üniversitesi Hastane Merkezinin Radyoterapi Bölümü Dudak Kanseri Epidemiyolojik, Klinik, Parasinik ve Terapötik Profili: 20 Vaka

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### Abstract

**Aim:** Our study concerns 20 cases of cancer of the lips gathered in the department of radiotherapy of the University Hospital of Fes during a period of 5 years from 2012 to 2016.

Material and Methods: It is also interested in a theoretical and analytical study. The average age of our patients was 65 years old, predominantly male (86.3%).

Results: The diagnosis is usually simple, confirmed by the biopsy. The predominant histological type was spinocellular in 86.3%, consistent with literature data. The predominant seat was at the level of the lower lip at 72.8%. The treatment of this cancer had largely benefited from the progress made by reconstructive surgery using different techniques, brachytherapy and irradiation of ganglionic areas. In our series, the surgery consisted of a reasonable resection for small tumors, or an immediate repair surgery using different processes, whether they are locoregional (77.5% of cases), or processes remote (4.6% of cases).

Conclusion: Surgical treatment was an ideal solution, the results were satisfactory from a functional and aesthetic point of view. Our choice for the surgical technique depended on the tumor size, the possibilities of each flap and the case of each patient. In front of a malignant tumor of the lips, the treatment must aim at restoring the important functional quality for the swallowing, the phonation and to reconstruct the esthetic character of the lip.

Keywords: Cancer, lip, radiotherapy

### 0z

Amaç: Çalışmamız, Fes Üniversitesi Hastanesi radyoterapi bölümünde 2012'den 2016'ya kadar 5 yıllık bir sürede toplanan 20 dudak kanseri vakası ile ilgilidir.

Materyal ve Metod: Ayrıca teorik ve analitik bir çalışmadır. Ağırlıklı olarak erkek (% 86,3) hastalardan oluşan çalışmamızda, yaş ortalaması 65 idi. Tanı genellikle basittir, biyopsi ile doğrulanır.

**Bulgular.** Baskın histolojik tip literatür verileriyle tutarlı olarak% 86.3'te spinoselülerdi. Predominant yerleşim % 72.8 ile alt dudak seviyesindeydi. Bu kanserin tedavisi, farklı teknikler kullanılarak rekonstrüktif cerrahinin brakiterapi ve ganglionik alanların ışınlanması kaydettiği ilerlemeden büyük ölçüde faydalanmıştı. Serimizde cerrahi, küçük tümörler için makul bir rezeksiyon veya lokal olarak (vakaların% 77.5'i) veya uzaktan (vakaların% 4.6'sı) farklı süreçleri kullanan acil onarım cerrahisinden oluşuyordu.

**Sonuç:** Cerrahi tedavi ideal bir çözümdü, sonuçlar fonksiyonel ve estetik açıdan tatmin ediciydi. Cerrahi teknik için seçimimiz tümör boyutuna, her flebin olasılığına ve her hastanın durumuna bağlıdır. Dudakların malign bir tümörünün önünde, tedavi yutma, fonlama ve dudağın estetik karakterini yeniden yapılandırmak için önemli fonksiyonel kaliteyi düzeltmeyi amaçlamalıdır.

Anahtar Kelimeler: Kanser, dudak, radyoterapi

### INTRODUCTION

The cancer of the lip is a malignant tumor of origin most often dermatological and develops mainly on the

cutaneous slope and the vermilion. The mucosal starting point is much rarer. The frequency of lip cancers compared to oral cancer is 6.6% [1,2], the frequency is 1.7% compared to cancer of the upper aerodigestive tract. The frequency

is 12% compared to tumors of the head and neck [3]. The most common histological variety is spino-celullary epithelioma. The age of onset is around the sixth decade with a male predilection [4-6]. The location at the lower lip is the most common. The causes that are essentially incriminated in the development of labial cancers are sun exposure, tobacco use and chronic irritations [1,7-11]. The diagnosis is histological following a tumor biopsy. These cancers may be confusing before the anatomopathological study with several pathologies, but the real problem is posed by precancerous lesions. The usual treatment is lymph node dissection surgery, or brachytherapy, which may be currently indicated as the treatment of choice in some situations. Radiotherapy is often performed postoperatively, after anatomopathological study of the operative specimen and lymph node dissection. Tumor excision creates losses of substances that are repaired by more complex plastic surgery techniques that vary by seat and extent of loss of substance. This reconstruction aims to give the best result with a minimum of functional and aesthetic sequelae.

### **MATERIAL AND METHODS**

Our work is a retrospective, monocentric, study of 20 cases of cancer of the lips collected in the radiotherapy department of the university hospital center of FEZ during a period of 5 years from 2012 to 2016, Our goal is to report the different epidemiological, diagnostic, therapeutic and prognostic aspects of lip cancers and to analyze the epidemiological factors and establish the means of prevention. He is also interested in a theoretical and analytical study. Inclusion criteria were: Histologically confirmed lip cancer + exploitable records. The exploitation of the files was done by a file of exploitation which we established and containing various parameters Results: The average age was 65 years predominantly male (86.3%). Tobacco (80%) and sun exposure (45%) having a particular antecedent. The macroscopic appearance was ulcero-budding (55%), budding in 25% of cases, and ulcerated (20%) cases. The predominant histological type

was squamous cell carcinoma in 84.2%, squamous cell carcinoma (15%), basal cell carcinoma (5%) (Figure 1: A, B, C and D).

The predominant seat was at the level of the lower lip at a rate of 90%. The tumor was classified as T1 in 35%, T2 in 30%, T3 in 5% and T4 in 30%. For lymph node involvement, N0 was reported in 11 cases (55%), N1 in 2 cases (10%), N2 in 5 cases (25%), N3 in 2 cases (10%) (Figure 2) and 20 cases. are non-metastatic [13].

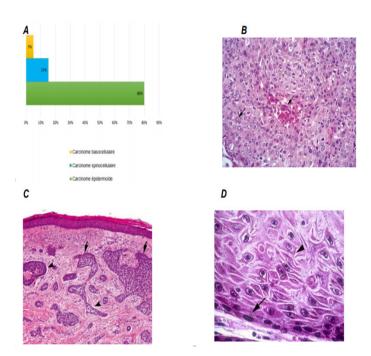


Figure 1. A= Histological types of lip cancers, B=squamous cell carcinoma: tumor proliferation with cells whose cytoplasmic boundaries are clearly visible (gray arrow) and producing keratin (black arrows), C= forming clusters of cells reminding the cells of the epidermal basal, forming a small palisade bordering (arrows) and sometimes surrounded by a retractive artifact (arrowheads), D= squamous cell carcinoma: Arrow: base of cubic cells; Arrowhead: polyhedral cells

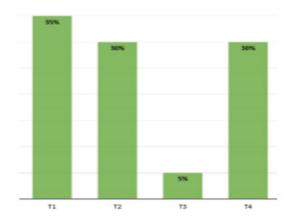
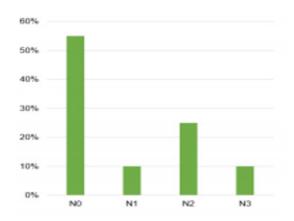
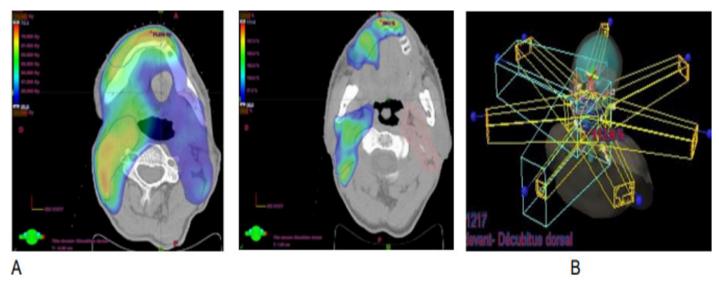


Figure 2. Percentage of each stage in our study



In our series, 13 patients underwent surgery (65%) followed by external radiotherapy (figure (3) = A, B) in 12 patients, 4 of whom received concomitant chemotherapy, and one patient received postoperative brachytherapy. The other 7 patients received only external radiotherapy, 4 of which were associated with concomitant chemotherapy.



**Figure 3:** A= Axial tomodensitometric sections of 3 cm thick passing through the mandible and maxilla; Dose distribution for an irradiation of a patient with a lower lip cancer treated by RCMI at the radiotherapy department of the HASSAN II university center in Fez B= small fields of irradiation After a median follow-up of 20 months, 14 patients are in good locoregional control, 2 patients are progressing, and 4 patients are lost to follow-up.

### DISCUSSION

At the end of our study, it appears that lip cancer is the most frequent mucosal location. The average age is 63 years [4], and between 60 and 70 [13]. The average age of onset of lip cancers in our series is 65, consistent with literature data. CE of the lips is the main carcinoma of the half-mucous membranes. It accounts for 25 to 30% of EC oral mucosa [1, 13], nearly 10% of skin cancers and 1.7% of cancers of the upper aerodigestive tract [14], such as cystic adenoid carcinomas (cylindromes) developed from submucosal accessory salivary glands, sarcomas or melanomas. Lower labial involvement is most commonly found between 80% and 98% [15,16]. In our series, lower labial localization accounted for 90% of cases. According to the TNM classification of the 1986 International Union of Cancerology Classification (IUCC), more than half of our patients are classified as T1T2: 65%. This could be explained by the fact that our patients are consulting more and more at an early stage. The distribution of our patients according to the new classification is consistent with the data of different authors. [17,18]. As far as treatment is concerned, there is currently no specific consensus and the therapeutic attitude differs from one team to another. However, surgery is recognized as the reference treatment for these tumors since it has the advantage of providing a piece of excision allowing the histological confirmation of the diagnosis and the verification of the quality of the excision. It can also cure more than 90% of patients [19, 20]. Surgical management is often delicate at the level of the lips because it is often

necessary to respect margins of excision of 6 mm to 1 cm taking into account the morphological and functional features of the lips. Exeresis of the tumor may be accompanied by lymph node dissection and / or adjuvant treatment. Radiotherapy can be used for the treatment of the primary tumor but also for lymph node involvement. It can be proposed as first-line when surgery is not possible (contraindication, refusal of the patient) and when it is likely to induce major functional and / or morphological disorders. In our series, surgical excision was performed in 13 patients. Brachytherapy is the treatment of choice for most teams. The results of brachytherapy are usually favorable with a cure rate of 90 to 95% for T1, 91% for T2, while for T3 T4. Survival decreases with stage of ganglion invasion with a need for competent operator to obtain satisfactory results [16,19]. In addition, a retrospective and multicentric analysis of the results of treatment of 1870 lip cancers was published by the European group of brachytherapy, with a minimum follow-up of 2 years. The local control rate obtained with exclusive brachytherapy with iridium 192 was 98.4% for tumors classified as T1, 96.6% for T2, and 89.9% for T3 (more than 4 cm). The normal appearance of the lip was retained in 82%, 51% and 27% of patients with T1, T2 and T3 tumors, respectively. There were visible sequelae in 17%, 44% and 64% of patients and a poor aesthetic or functional result in 1.5 and 9%. The results of brachytherapy are marked by an inflammatory reaction of the lip for several weeks, impeding the diet especially in the elderly. Irradiation always concerns the lesion itself, or the tumor bed in case of primary surgery, and the ganglion

drainage areas. These two target volumes, tumor and ganglia, are irradiated with a margin of safety depending on the irradiation technique, usually of the order of one centimeter. The prognosis is a function of tumor stage, lymph node and degree of differentiation. The specific survival at 5 years is 95%, identical for small tumors after surgery or radiotherapy; for tumors larger than 3 cm, it is only 70 to 80% and only 25 to 50% for T4 [19]. The same local control is obtained by brachytherapy or surgery for T1, T2, T3, but at the cost of fewer morphological and functional sequelae after brachytherapy in very extensive lesions. The ganglionic involvement is linked to stage T: 5% of T1 and T2 have a clinical ganglionic attack against 67% of tumors greater than T2. The curability of patients N greater than N0 does not exceed 40-50%. Locoregional recurrences occur at similar frequencies after surgery or radiotherapy: in 5 to 11% of T less than 1 cm, and up to 53% of T4; 50% of patients with local or ganglionic recurrence are controlled after surgery or radiotherapy [21]. Irradiation is reserved for histologically invaded ganglionic areas (N +). The dose delivered is usually 45 Gray [21]. In our series, no patient was treated with exclusive radiotherapy. Six patients, 27% benefited from post-operative radiotherapy. Chemotherapy has a limited place in the management of EC lips, its effectiveness in the treatment of metastases seems disappointing, the response rate obtained is poor for most studies [22] The monitoring procedures are not consensual, however, it must be reconciled during the first five years since 95% of local recurrences and metastases are detected during this period [19, 23]. The rate of tumor recurrence ranges from 2.8 to 30.3% [24,25]. In our study it was 10%. It seems weaker than in the literature series and this can be explained by the short duration of follow-up and the large number of patients lost to follow-up. In fact, only 14 patients were followed (70%). The overall survival rate of EC lipid at 5 years, varies from 79 to 83.3% [26,27] according to the series; this rate was evaluated at 90% in our study within the limits of the duration of follow-up.

# CONCLUSION

Radiotherapy and surgery are the reference treatments. The therapeutic decision is the result of a multidisciplinary consultation between experienced practitioners. In favor of brachytherapy, we retain the good quality of healing in the absence of tissue defect.

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