

# Brazilian Journal of

### OTORHINOLARYNGOLOGY



www.bjorl.org

### ORIGINAL ARTICLE

# Predictive factors of occult neck metastasis in patients with oral squamous cell carcinoma\*



Renato Fortes Bittar\*, Homero Penha Ferraro, Marcelo Haddad Ribas, Carlos Neutzling Lehn

Hospital do Servidor Público Estadual (IAMSPE), São Paulo, SP, Brazil

Received 30 June 2015; accepted 18 September 2015 Available online 17 December 2015

#### **KEYWORDS**

Head and neck neoplasms; Oral neoplasms; Survival outcomes; Lymph node metastasis; Prognosis; Squamous cell carcinoma

### Abstract

Introduction: It is well established that cervical lymph node metastasis is the most important prognostic factor in patients with oral squamous cell carcinoma of the upper aerodigestive tract. The definition of parameters and classifications that could separate patients in groups of low, intermediate and high-risk is being attempted for several years.

*Objective:* The objective of this study was to determine possible predictive factors related to the occurrence of occult cervical lymph node metastasis through the analysis of histopathological reports of surgical specimens obtained after oral squamous cell carcinoma resection and selective neck dissections of patients initially classified as N0.

*Methods*: This was a primary, retrospective, observational, case-control study. Histopathological reports were reviewed to determine if some findings were related to the occurrence of occult lymph node metastasis. The events analyzed were oral cavity subsites, pT-stage, muscular infiltration, desmoplasia, vascular emboli, perineural infiltration, tumor thickness and compromised margins.

Results: Occult cervical metastasis accounted for 19.10 percent of the cases. Desmoplasia, perineural infiltration, tumor thickness and pT4a stage are predictive factors of occult neck metastasis (p-value = 0.0488, 0.0326, 0.0395, 0.0488, respectively).

Conclusion: The accurate definition of predictive factors of occult cervical metastasis may guide the selection of patients that should be referred to radiotherapy, avoiding the unnecessary exposure of low-risk patients to radiation and allowing a better regional control of the disease in those of moderate or high risk.

© 2015 Associação Brasileira de Otorrinolaringologia e Cirurgia Cérvico-Facial. Published by Elsevier Editora Ltda. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

E-mails: renatobittar@yahoo.com, rfbittar@gmail.com (R.F. Bittar).

<sup>\*</sup> Please cite this article as: Bittar RF, Ferraro HP, Ribas MH, Lehn CN. Predictive factors of occult neck metastasis in patients with oral squamous cell carcinoma. Braz J Otorhinolaryngol. 2016;82:543-7.

<sup>\*</sup> Corresponding author.

544 Bittar RF et al.

### **PALAVRAS-CHAVE**

Neoplasias de cabeça e pescoço; Neoplasias orais; Resultados de sobrevida; Metástase linfática; Prognóstico; Carcinoma espinocelular

### Fatores preditivos de metástases cervicais ocultas em pacientes com carcinoma epidermóide de boca

#### Resumo

Introdução: Já é bem estabelecido que a metástase oculta em linfonodo cervical é o fator prognóstico mais importante em pacientes com Carcinoma epidermóide de boca (CEB) do trato aerodigestivo superior. Há anos pesquisadores tentam definir parâmetros e classificações que poderiam separar os pacientes em grupos de baixo, médio e alto risco.

*Objetivo*: O objetivo deste estudo foi determinar possíveis fatores preditivos relacionados com a ocorrência de metástase oculta em linfonodo cervical, por meio da análise de laudos histopatológicos de espécimes cirúrgicos obtidos após ressecção de CEB e dissecções seletivas do pescoço em pacientes inicialmente classificados como NO.

Método: Este foi um estudo primário, retrospectivo, observacional e de caso-controle. Laudos histopatológicos foram revisados para determinar se alguns resultados estavam relacionados com a ocorrência de metástases em linfonodos oculto. Os eventos analisados foram: subsítios dentro da cavidade oral, estágio-pT, infiltração muscular, desmoplasia, embolia vascular, infiltração perineural, espessura do tumor e margens comprometidas.

Resultados: Metástases cervicais ocultas foram responsáveis por 19,10% dos casos. Desmoplasia, infiltração perineural, espessura do tumor e estágio pT4a foram fatores preditivos de metástase cervical oculta (p = 0,0488, 0,0326, 0,0395, 0,0488, respectivamente).

Conclusão: A definição precisa dos fatores preditivos de metástase cervical oculta pode orientar a seleção de pacientes que devem ser submetidos a radioterapia, evitando a exposição desnecessária dos pacientes de baixo risco à radiação, e melhorar o controle regional da doença em pessoas de risco moderado ou alto.

© 2015 Associação Brasileira de Otorrinolaringologia e Cirurgia Cérvico-Facial. Publicado por Elsevier Editora Ltda. Este é um artigo Open Access sob uma licença CC BY (http://creativecommons.org/licenses/by/4.0/).

### Introduction

It is well established that cervical lymph node metastasis is the most important prognostic factor in patients with oral squamous cell carcinoma (OSCC) of the upper aerodigestive tract.<sup>1-4</sup>

There is a distinct relationship between the number and level of cervical nodes compromised, capsular rupture and positive margins with five-year survival.<sup>1-5</sup>

Neck palpation during clinical exam still has great value; however, it has been shown that this may result in a false-negative rate of around 28.9 percent.<sup>2</sup> Palpation sensitivity was estimated at 75 percent, and specificity at 83 percent, against 81 percent of sensitivity and 83 percent of specificity shown by computed tomography. Other authors demonstrated palpation sensitivity at 82 percent and specificity at 80 percent and found no significant differences comparing with cervical ultrasound.<sup>6,7</sup>

Neck dissection is well accepted for defined evidence of cervical lymph node metastasis; however, there is still great controversy about the type and extension of neck treatment in clinically negative cervical disease.<sup>2–5</sup>

The definition of parameters and classifications that could separate patients in groups of low, intermediate and high risk is being attempted for several years. Studies have implied factors such as histologic grade, muscular infiltration, desmoplasia, vascular emboli, perineural infiltration, tumor thickness and compromised margins. 5,8-11

The presence of these multiple variables of recurrence was a precise indicator of poor prognosis. 5,12,13 Other studies have shown that lymphatic or vascular invasion is an independent risk factor. 14,15

The objective of this study was to determine possible predictive factors related to the occurrence of occult cervical lymph node metastasis through the analysis of histopathological reports of surgical specimens obtained after OSCC resection and selective neck dissections of patients initially classified as NO.

### **Methods**

This was a primary, retrospective, observational, case-control study.

Data was obtained from a single institution. The research was performed from 1995 to 2014.

Histopathological data was obtained using chart numbers. No intervention was performed and no attempt to contact patients to obtain any kind of information was made. Patient's names or any other means of identification were not used. This study was in accordance with all principles of the Helsinki Declaration.

The search started with the gathering of all records involving oral cancer. After eliminating all double entries, we reviewed all patients' charts and selected every patient that was initially classified as NO.

Exclusion criteria were double entries, incomplete chart information, patients without surgical conditions or who

### Download English Version:

## https://daneshyari.com/en/article/4106059

Download Persian Version:

https://daneshyari.com/article/4106059

<u>Daneshyari.com</u>