

UNIVERSIDADE FEDERAL DE SANTA CATARINA
CENTRO DE CIÊNCIAS DA SAÚDE
DEPARTAMENTO DE ODONTOLOGIA
CURSO DE ODONTOLOGIA

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Levantamento epidemiológico de lesões em lábio: estudo retrospectivo

Florianópolis

2022

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Trabalho de Conclusão do Curso de Graduação em Odontologia do Centro de Ciências da Saúde da Universidade Federal de Santa Catarina como requisito para a obtenção do título de Cirurgião-Dentista.
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Florianópolis

2022

FICHA CATALOGRÁFICA

Ficha de identificação da obra elaborada pelo autor,
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Miranda, Mayara de Castro
Levantamento epidemiológico de lesões em lábio : estudo retrospectivo / Mayara de Castro Miranda ; orientadora, Elena Riet Correa Rivero, coorientadora, Elis Ângela Batistella, 2022.
55 p.

Trabalho de Conclusão de Curso (graduação) -
Universidade Federal de Santa Catarina, Centro de Ciências da Saúde, Graduação em Odontologia, Florianópolis, 2022.

Inclui referências.

1. Odontologia. 2. patologia bucal. 3. odontologia. 4. doenças labiais. 5. carcinoma epidermoide. I. Rivero, Elena Riet Correa. II. Batistella, Elis Ângela. III. Universidade Federal de Santa Catarina. Graduação em Odontologia. IV. Título.

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Levantamento epidemiológico de lesões em lábio: estudo retrospectivo

Este Trabalho de Conclusão de Curso foi julgado adequado para obtenção do Título de “Cirurgião-Dentista” e aprovado em sua forma final pelo Curso de Odontologia
Florianópolis, 29 de Julho de 2022.

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AGRADECIMENTOS

A **Deus**, por ter me dado a vida e por me permitir conquistar os meus objetivos e sonhos.

À minha família, em especial aos meus pais, **Pedro Paulo** e **Vanusa**, e meu irmão, **Leonardo**, que sempre me apoiaram, me incentivaram e não mediram esforços para que eu alcançasse os meus objetivos.

À minha dupla e amiga **Pyetra Martinelli**, que sempre esteve ao meu lado, do início ao fim, compartilhando aprendizados e me dando suporte nos desafios encontrados.

Aos amigos que fiz durante a graduação **Mariana Zanchetti, Luiz Antonio, Sérgio Murilo, Andreza Meneghel, Ana Paula, Laura Quadros, Leonardo Marcos e Gabriel Rosa**.

Aos meus amigos de longa data **Lana Rautemberg, Debora Rosa, Helena Tomaz, Matheus Taniguchi e Camila Guarnieri**, que me acompanham desde o início da minha trajetória.

Ao meu namorado **Cole Banister**, pelo incentivo, apoio e conselhos.

À minha orientadora e professora **Elena Rivero**, por todas as oportunidades e ensinamentos.

À minha coorientadora **Elis Batistella**, pela paciência ao ensinar e por todos os conselhos.

A todos os **professores e profissionais** que me deram oportunidades e contribuíram com a minha formação.

À **Universidade Federal de Santa Catarina**, por ter me proporcionado uma formação pública e de qualidade.

RESUMO

Objetivo: Avaliar a prevalência de lesões em lábio em um serviço de patologia bucal e comparar os resultados com a literatura atual. **Métodos:** Foi realizada a análise dos laudos histopatológicos de dezembro de 2006 a abril de 2021. Dados referentes ao diagnóstico e as características clínicas dos pacientes e das lesões foram coletados. Além disso, realizou-se uma revisão de literatura nas bases de dados do PubMed, Wiley Online Library, Science Direct e Google Scholar. **Resultados:** Ao total, 4289 laudos de biópsia orais foram levantados, dos quais 18,8% (808 casos) eram representativos de lesões em lábio. As lesões labiais afetaram predominantemente mulheres (53,1%), leucodermas (75,1%) e indivíduos na sexta década de vida (22,3%). O lábio inferior foi mais frequentemente afetado (74,1%). A hiperplasia fibrosa inflamatória (26,7%) foi a lesão mais prevalente, seguida de mucocele (20,7%), queilite actínica (18,9%) e carcinoma epidermoide (5,7%). Em relação à revisão de literatura, três estudos foram incluídos, nos quais a prevalência de lesões em lábio variou de 4,4% a 16,4%, sendo mucocele a lesão mais prevalente em todos os estudos incluídos. **Conclusões:** As lesões em lábio apresentaram prevalência expressiva no presente estudo e na literatura mundial. Lesões reativas, distúrbios de glândulas salivares, condições epiteliais e neoplasias malignas foram as lesões mais prevalentes. A elevada prevalência de queilite actínica, condição que pode evoluir para carcinoma epidermoide de lábio, reforça a importância do diagnóstico precoce de lesões em lábio.

Palavras-chave: doenças labiais; neoplasias labiais; manifestações bucais; queilite; carcinoma epidermoide.

ABSTRACT

Objective: To assess the prevalence of lip lesions in a Brazilian Oral Pathology Service and compare results with available literature. **Methods:** Histopathological records were analyzed from December 2006 to April 2021. Data regarding the diagnosis and clinical information of the patients with lip lesions were collected. A comprehensive literature review for similar studies was performed on PubMed, Wiley Online Library, Science Direct, and Google Scholar. **Results:** A total of 4289 oral biopsy registries were found, of which 18.8% (808 cases) occurred on the lips. Lip lesions affected predominantly females (53.1%), fair-skinned individuals (75.1%), and prevailed in the sixth decade of life (22.3%). The lower lip was the anatomical site most frequently affected (74.1%). Inflammatory fibrous hyperplasia (26.7%) was the most prevalent lesion, followed by mucocele (20.7%), actinic cheilitis (18.9%), and lip squamous cell carcinoma (5.7%). Regarding the literature review, three studies were included, in which the prevalence of lip lesions ranged from 4.4% to 16.4%, and mucocele was the most predominant lip lesion in all included studies. **Conclusions:** Lip lesions showed expressive prevalence in this study and in the available literature. Reactive lesions, salivary gland disorders, epithelial conditions, and malignant neoplasms presented higher prevalence among lip lesions. Furthermore, the prominent prevalence of actinic cheilitis, which can evolve to lip squamous cell carcinoma, reinforces the importance of early diagnosis of lip lesions.

Keywords: lip diseases; lip neoplasms; oral manifestations; cheilitis; carcinoma, squamous cell.

LISTA DE TABELAS

Tabela 1 - “Table 1. Distribution of lip lesions diagnosed at the Oral Pathology Laboratory, UFSC, Brazil, from 2006 to 2021, according to the histopathological diagnosis and sex reported.”	28
Tabela 2 – “Table 2. Distribution of individuals diagnosed at the Oral Pathology Laboratory, UFSC, Brazil, from 2006 to 2021, according to the histopathological diagnosis, ethnicity and location.”	30
Tabela 3 – “Table 3. Distribution of individuals diagnosed at the Oral Pathology Laboratory, UFSC, Brazil, from 2006 to 2021, according to the histopathological diagnosis and age group.”	31
Tabela 4 – “Table 4. Descriptive characteristics and main findings of included articles from literature review (April 16, 2022).”	32

LISTA DE ABREVIATURAS E SIGLAS

- AC – Queilite actínica (do inglês, *actinic cheilitis*)
- AD – Doenças autoimunes (do inglês, *autoimmune diseases*)
- BN – Neoplasias benignas (do inglês, *benign neoplasms*)
- CA – Candidíase (do inglês, *candidiasis*)
- EC – Condições epiteliais (do inglês, *epithelial conditions*)
- HE – Hemangioma (do inglês, *hemangioma*)
- IFH – Hiperplasia fibrosa inflamatória (do inglês, *inflammatory fibrous hyperplasia*)
- ID – Doenças infecciosas (do inglês, *infectious diseases*)
- LPB – Laboratório de Patologia Bucal
- LSCC – Carcinoma epidermoide de lábio (do inglês, *lip squamous cell carcinoma*)
- MN – Neoplasias malignas (do inglês, *malignant neoplasms*)
- MU – Mucocele (do inglês, *mucocele*)
- NCI – Inflamação crônica não específica (do inglês, *nonspecific chronic inflammation*)
- PL – Lesões pigmentadas (do inglês, *pigmented lesions*)
- RL – Lesões reativas (do inglês, *reactive lesions*)
- SCP – Papiloma (do inglês, *squamous cell papilloma*)
- SGD – Distúrbios de glândulas salivares (do inglês, *salivary gland disorders*)
- UFSC – Universidade Federal de Santa Catarina
- UV – Luz ultravioleta (do inglês, *ultraviolet light*)
- VL – Lesões vasculares (do inglês, *vascular lesions*)

SUMÁRIO

1	INTRODUÇÃO	11
2	OBJETIVOS	13
2.1	OBJETIVO GERAL	13
2.2	OBJETIVOS ESPECÍFICOS	13
3	ARTIGO PARA SUBMISSÃO	14
4	CONSIDERAÇÕES FINAIS.....	34
	REFERÊNCIAS.....	35
	ANEXO A – ATA DA DEFESA	42
	ANEXO B – NORMAS DA REVISTA.....	43
	ANEXO C - PARECER CONSUBSTANCIADO DO CEP.....	53

1 INTRODUÇÃO

A face possui uma importante contribuição aos indivíduos, conferindo-lhes identidade, beleza, autoestima, confiança e bem-estar psicossocial (BAUDOIN et al., 2019; GHORBANYJAVADPOUR et al., 2019). Devido à sua posição central e proeminência na face, os lábios desempenham um papel marcante nas expressões emocionais e na atratividade (BAUDOIN et al., 2019). Portanto, injúrias no lábio podem afetar a autoestima dos pacientes e as interações sociais devido ao desconforto ou ao comprometimento estético que essas lesões podem causar (BAUDOIN et al., 2019; GHORBANYJAVADPOUR et al., 2019; PATIL et al., 2014).

Uma ampla variedade de doenças com diferentes etiologias pode afetar os lábios (ARSLAN et al., 2015; OSTERNE et al., 2011). Devido à sua posição anatômica na face, o lábio é exposto a diversos fatores ambientais (ARSLAN et al., 2015; BENTLEY et al., 2003). Fatores como a luz ultravioleta (UV), tabagismo e trauma constantemente afetam os lábios e podem atuar na patogênese de doenças labiais (ARSLAN et al., 2015; BENTLEY et al., 2003). A fragilidade da semi-mucosa labial, a qual é desprovida de folículos pilosos e menos ceratinizada em comparação com a pele, contribui para a sua suscetibilidade em desenvolver determinadas lesões (BENTLEY et al., 2003; DANCYGER et al., 2018; PICASCIA et al., 1897).

O conhecimento e a conscientização sobre as doenças labiais são de extrema relevância, pois permitem preveni-las ou realizar um diagnóstico precoce, minimizando as sequelas de tratamentos cirúrgicos ou outras intervenções, por fim, melhorando o prognóstico de várias doenças (ARSLAN et al., 2015; OSTERNE et al., 2011). A correlação dos dados clínicos de pacientes portadores de lesões labiais permite delinear quais grupos de pessoas são suscetíveis a determinadas lesões (ARSLAN et al., 2015; OSTERNE et al., 2011). No entanto, além da avaliação clínica, a análise histopatológica é essencial para realizar um diagnóstico preciso (ARSLAN et al., 2015; OSTERNE et al., 2011).

A disseminação do conhecimento dos fatores de risco para doenças labiais contribui para a conscientização e realização de campanhas preventivas para profissionais de saúde e indivíduos sob risco (ARSLAN et al., 2015; OSTERNE et al., 2011; PATIL et al., 2014). Entretanto, até o presente momento poucos estudos científicos acerca da prevalência de lesões no lábio foram publicados.

Portanto, o presente estudo teve como objetivo investigar a prevalência de lesões labiais diagnosticadas histologicamente em um serviço de patologia bucal e comparar os resultados com a literatura atual.

2 OBJETIVOS

2.1 OBJETIVO GERAL

Realizar um levantamento epidemiológico retrospectivo das lesões em lábio diagnosticadas pelo Laboratório de Patologia Bucal da Universidade Federal de Santa Catarina (LPB-UFSC) no período de dezembro de 2006 a abril de 2021.

2.2 OBJETIVOS ESPECÍFICOS

Identificar e avaliar a prevalência dos casos de lesões em lábio diagnosticados pelo LPB-UFSC.

Avaliar as características clínicas das lesões de lábio diagnosticadas no LPB-UFSC e compará-las aos dados clínicos de pacientes (presentes nas fichas de biópsia).

Identificar possíveis hábitos ou fatores de risco associados com o aparecimento das lesões.

Comparar os dados coletados no presente estudo com os dados descritos na literatura.

3 ARTIGO PARA SUBMISSÃO

Este trabalho encontra-se nas normas da revista “Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology”. Disponível em: <https://www.elsevier.com/journals/journal-of-oral-and-maxillofacial-surgery-medicine-and-pathology/2212-5558/guide-for-authors>. Acessado em junho de 2022.

Article type: Original research

Article title: Prevalence of lip lesions: a 14-year retrospective study in Santa Catarina, Brazil

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Conflict of interest: Authors declare no conflict of interest.

Ethical Approval: The ethics committee of the authors' institution approved this study (approval number: 42095715.1.0000.0121).

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Abstract

Objective: To assess the prevalence of lip lesions in a Brazilian Oral Pathology Service and compare results with available literature.

Methods: Histopathological records were analyzed from December 2006 to April 2021. Data regarding the diagnosis and clinical information of the patients with lip lesions were collected. A comprehensive literature review for similar studies was performed on PubMed, Wiley Online Library, Science Direct, and Google Scholar.

Results: A total of 4289 oral biopsy registries were found, of which 18.8% (808 cases) occurred on the lips. Lip lesions affected predominantly females (53.1%), fair-skinned individuals (75.1%), and prevailed in the sixth decade of life (22.3%). The lower lip was most frequently affected (74.1%) than upper lip. Inflammatory fibrous hyperplasia (26.7%) was the most prevalent lesion, followed by mucocele (20.7%), actinic cheilitis (18.9%), and lip squamous cell carcinoma (5.7%). Regarding the literature review, three studies were included, in which the prevalence of lip lesions ranged from 4.4% to 16.4%, and mucocele was the most predominant lip lesion in all included studies.

Conclusions: Lip lesions showed expressive prevalence in this study and in the available literature. Reactive lesions, salivary gland disorders, epithelial conditions, and malignant neoplasms presented higher prevalence amid lip lesions. Furthermore, the prominent prevalence of actinic cheilitis, which can evolve to lip squamous cell carcinoma, reinforces the importance of early diagnosis of lip lesions.

Keywords: lip diseases; lip neoplasms; oral manifestations; cheilitis.

1. Introduction

The face has a major contribution to the aesthetic of individuals, providing identity, self-esteem, confidence, and psychosocial well-being [1,2]. Due to their central position and prominence in the face, the lips play an important role in emotional expressions and attractiveness [1]. Thus, lips injuries might affect patients' self-esteem and social interactions due to discomfort or because of the aesthetic defect these lesions can lead to [1–3].

A wide range of diseases with distinct origins may affect the lips [4,5]. Due to the anatomical position in the face, lips are exposed to several environmental factors [4,6]. Ultraviolet light (UV), tobacco, drugs, and trauma, constantly affect the lips and may act on the pathogenesis of lip diseases [4,6]. The fragility of the lip semi-mucosa, which is devoid of hair follicles and less keratinized in relation to the skin, contributes to its susceptibility to certain lesions [6–8].

Knowledge and awareness about lip diseases are important for the development of preventive measures and can aid clinicians towards an early diagnosis, minimizing the sequelae of surgical treatments or other interventions, ultimately improving the prognosis of several diseases [4,5]. The correlation of clinical data of patients with labial lesions provides guidance concerning the identification of groups of people that are susceptible to specific types of lesions [4,5]. Nevertheless, correlation of clinical characteristics with histopathological features is essential for a definitive diagnosis [4,5]. Disseminating knowledge about risk factors for lip diseases contributes to raise awareness and send preventative messages to health professionals and individuals at risk [3–5]. However, only a few studies with data regarding the prevalence of lip lesions have been published to date.

Therefore, the purpose of this study was to investigate the prevalence of lip lesions histologically diagnosed in an oral pathology service and compare the results with current literature.

2. Materials and methods

2.1 Main study

Biopsy and histopathological records from the Oral Pathology Laboratory of the Federal University of Santa Catarina were screened for lips lesions cases. Data were collected from December 2006 to April 2021. Clinical data consisted of patients' sex and age, ethnicity, clinical and histopathological diagnostic, anatomical location, and habits or risk factors. Lip

diseases were grouped as: reactive lesions, salivary gland disorders, infectious diseases, pigmented lesions, autoimmune diseases, benign neoplasms, epithelial conditions, malignant neoplasms, and others (Table 1). Ethnicity was categorized as fair-skinned for Caucasians, dark-skinned for Black individuals, and others. The ethics committee of the authors' institution approved this study (approval number: 42095715.1.0000.0121). The anonymity of participants was assured as recommended by the Helsinki Declaration. Statistical analyses were performed using the software SPSS Statistics 25 (IBM Corp., Armonk, NY, USA). Descriptive characteristics of patients and lesions were expressed by means of absolute and relative frequencies.

2.2 Literature review

A comprehensive review of the literature was performed to assess studies that investigated the prevalence of lip lesions. Observational studies written in English that estimated the prevalence of lesions located in the lip were eligible for inclusion. The following exclusion criteria was applied: 1) studies that did not report the histological diagnosis; 2) studies not published in English; 3) studies with no data for lip lesions; 4) full-text not available; and 5) studies in which the lip lesions sample was smaller than 100 cases.

Electronic search strategies were developed and adapted for each of the following bibliographic databases: PubMed, Wiley Online Library, Science Direct, and Google Scholar. All searches were conducted on April 16, 2022. A reference manager (EndNote X7, Thomson Reuters) was used to collect references and remove duplicates. A two-phase process was performed in the selection of studies. In phase-1, titles and abstracts were screened for potentially eligible studies. In phase-2, a full-text read was performed and studies that met eligibility criteria were included. Author, year of publication, country, sample size, number of lip lesions, gender, diagnostic categories, and predominant lip lesions, according to main study classification were collected from included studies.

3. Results

3.1 Main study

A total of 4289 cases were identified, of which 808 (18.8%) cases were lip diseases. From cases of lip lesions, females (53.1%) and fair-skinned individuals (75.1%) were predominantly affected. The mean age was 43.6 ± 19.0 years, ranging from 1 to 87 years, and 22.3% of the lip lesions affected patients in their 6th decade of life. The main anatomical site

was the lower lip (74.1%). Trauma (19.8%), followed by smoking (14.2%) and sun exposure (5.2%) were the most frequent risk factors reported.

Most lip lesions consisted of reactive lesions (29.7%), followed by salivary gland disorders (24.9%), and epithelial conditions (19.2%). Among the labial manifestations, fibroma, also known as inflammatory fibrous hyperplasia (IFH), was the most prevalent lesion (26.7%), followed by mucocele (MU) (20.7%), actinic cheilitis (AC) (18.9%), and lip squamous cell carcinoma (LSCC) (5.7%).

IFHs manifested mostly in females (74.1%) and fair-skinned patients (74.5%). IFH affected mainly adults in their 6th decade of life (31.9%), followed by the 7th (4.1%) and the 5th decade of life (20.8%). The predominant site of IFH presentation was the lower lip (56.5%). A history of traumatic injuries was reported in 43.9% of the IFH cases.

Mucocele affected similarly males (52.1%) and females (47.9%). A preponderance of fair-skinned was observed within mucocele patients (67.7%), with a higher prevalence observed in young patients aging between the 3rd (31.7%) and the 2nd (28.1%) decades of life. The anatomical site most affected by mucocele cases was the lower lip (96.4%). The most reported risk factor was lip trauma (12.6%); however, in 80.2% of mucocele cases, the habits or potential risk factors were not informed.

Actinic cheilitis affected mostly males (67.3%), fair-skinned patients (84.3%), aging between 40 and 69 years old (approximately 75%). The majority of actinic cheilitis cases (84.3%) affected the lower lip. Smoking (28.1%) and sun exposure (20.3%) were the most reported risk factors for actinic cheilitis, however in 25.5% of the records the habit was not reported.

LSCC affected mostly males (78.3%). Most cases in which patients' ethnicity was reported occurred in fair-skinned individuals (80.4%), but in 19.6% of the records the ethnicity was not informed. Individuals in their 7th (32.6%) and 6th (23.9%) decades of life had the greatest LSCC prevalence. The lower lip was the most prevalent site of LSCC presentation (97.8%). Smoking (26.1%) and sun exposure (15.2%) were the most prevalent risk factors in patients with LSCC, although information regarding habits or risk factors was not reported in 17.4% of the LSCC cases.

Distribution of cases according to the histopathological diagnosis and sex, ethnicity, age group, and location is shown in Tables 1-3.

3.2 Literature review

The search strategy in electronic databases resulted in 3320 studies. In phase 1, after title and abstract reading, 76 studies were considered eligible for full-text reading. In phase 2, three studies met the inclusion criteria and were included for data synthesis, available in Table 4. All studies were conducted in Brazil [5,9,10] and were published between 2011 [5] and 2020 [9]. Biopsy registries were retrieved from a single oral pathology laboratory in the studies of Curra et al [10] and Barros et al [9]. The study of Osterne et al [5] consisted of a multicenter study conducted obtaining data from both medical and oral pathology laboratories. The prevalence of lip lesions was similar between males and females in all studies, with a slightly higher prevalence of females observed in the studies of Curra et al [10] and Barros et al [9]. The study of Curra et al [10] found a predominance of fair-skinned individuals in the sample and the studies of Osterne et al [5] and Barros et al [9] did not report data regarding ethnicity.

The total sample of oral biopsy registries consisted of 5511 records in the study of Barros et al [9], 26920 records in the study of Curra et al [10], and 6231 records in the study of Osterne et al [5]. The prevalence of lip lesions ranged from 4.4% (n= 1193) [10] to 16.4% (n= 1021) [5] in the included studies. Salivary gland disorders were the most prevalent group in two of the included studies [5,10]. In the study of Barros et al [9], however, the group of epithelial conditions was the most prevalent, followed by salivary gland disorders. The group of reactive lesions was the second most predominant in the studies of Curra et al [10] and Osterne et al [5]. Mucocele was the lip lesion most reported in all included studies [5,9,10] and the prevalence of this lesion ranged from 25.0% [9] to 38.0% [10]. In the studies of Curra et al [10] and Osterne et al [5] IFH was the second lesion most predominant. The prevalence of IFH ranged from 8.9% [9] to 25.8% [5] in the included studies. The actinic cheilitis and lip squamous cell carcinoma also showed high prevalence in the studies and the actinic cheilitis was the second lesion most prevalent in the study of Barros et al [9]. The prevalence of actinic cheilitis ranged from 9.6% [5] to 23.2% [9] and the prevalence of LSCC ranged from 2.7% [9] to 10.4% [5] in the included studies.

4. Discussion

Lips are the preferred site of manifestation for several diseases. However, only a few large-scale studies estimating the prevalence of lip lesions with similar methodology have

been published to date [5,9,10]. The present study revealed a prevalence of lip diseases of 18.8%, which is higher than that described in the studies of Osterne et al [5] (16.4% in 6231 patients), Barros et al [9] (10.7% from 5511 cases), and Curra et al [10] (4.4% in 26920 cases). The study of Curra et al [10] revealed a discrepancy in the total sample and in the prevalence of lip lesions compared to the main study. The main study presented the higher prevalence of lip lesions and the smaller total sample, while the study of Curra et al [10] reported the smaller prevalence of lip lesions and the higher total sample. Both studies presented similar methodology, being conducted in a single oral pathology service in the south of Brazil. The other studies [5,9,10] from the literature review showed similar results with the main study. The study of Osterne et al [5] was the only multicenter study in the literature review and showed the second larger total sample, revealing similar prevalence of lip lesions with the main study.

The slightly higher prevalence of females in this study corroborates with previous literature [9,10]. Additionally, the present work found a preponderance of patients with lip lesions being diagnosed between 50 and 59 years (22.3%), consistent with the results of Osterne et al [5]. A higher prevalence of cases involving the lower lip (74.1%) was found, in accordance with prior studies, possibly due to the high risk for traumatic injuries in this location [5,9,10].

The most frequent lesions in this research were IFHs (26.7%), mucocele (20.7%), actinic cheilitis (18.9%), and LSCC (5.7%). Previous studies by Barros et al [9] (25.0%), Curra et al [10] (37.9%), and Osterne et al [5] (28.4%) found that mucocele was the most prevalent lip lesion in their studies. The contrast of data found in this analysis can be owing to differences in the ethnicity of the sample, geographical variations, study design, and diagnostic criteria [3,11].

Reactive lesions can develop because of chronic irritation to oral mucosa [12]. Thereby, the prevalence of IFH in older patients observed in this study could potentially be related to trauma caused by ill-fitting oral prosthesis or due to chronic mucosal injury from active edges of dental remnants, or habit of nibbling the lip mucosa [13].

Oral mucoceles are caused by trauma of a minor salivary gland duct which leads to extravasation of mucus into surrounding tissues, forming a clinically visible bulla or vesicle [3,9,14,15]. Mucocele was equally distributed by gender, with a slight predominance in males (52.1%), corroborating with prior works [11,16]. However, other studies reported a slightly higher prevalence of mucocele cases in females [4,5,9,10,17]. In agreement with most of the

studies reviewed, mucocele prevailed in younger patients [4,5,17]. The lower lip was the anatomical site most affected (96.4%), which is frequently related in the literature as the preferential site for mucoceles [4,5,10,16,18]. This might be related to the greater prevalence of parafunctional habits in the lower lip, the higher number of salivary glands compared to the upper lip, and the increased susceptibility to traumatic injuries mainly in children [19,20].

Actinic cheilitis is a potentially malignant disorder [7,21]. Both actinic cheilitis (67.3%) and LSCC (78.3%) mostly affected males, in accordance with previous studies [4,5,9,10,16,18,21–31]. This could be related to the greater number of men in outdoors activities with chronic sun exposure and the higher propensity of women to use lip protective agents against sources of UV radiation, such as sunlight [7,14,32]. A prevalence of 84.3% of actinic cheilitis and 80.4% of LSCC in fair-skinned patients was observed in this work, corroborating previously literature [21]. Due to their lower quantity of melanin pigmentation, fair-skinned individuals are more susceptible to the development of actinic cheilitis and LSCC, since UV radiation is the primary etiological factor to these diseases [7,21]. Most of actinic cheilitis and LSCC cases occurred in older subjects [5,16,21,23,25–31,33]. This higher prevalence amid the older individuals could be related to several factors, including accumulation of UV damage across life, age-related immunosuppression, and diagnosis delay due to the slow disease course [7,22].

The lower lip was the most affected site for actinic cheilitis and LSCC, in accordance with previous studies [4,5,10,16,18,21,23–31]. The preferred manifestation in this site occurs because the lower lip is more affected by the sunlight than the upper lip due to its everted position and prominence in the face, which is reached with ease due to the angle of UV rays' incidence [6,7,32]. In addition, the lower lip presents a thinner epithelium when compared to the skin, being more prone to UV-related injuries for their low amount of keratin covering and reduced secretion from sebaceous and sweat glands [6–8]. Consistent with previous reports [21,24,26,28,30], this study revealed a notable prevalence of actinic cheilitis and LSCC in individuals with habit of smoking (28.1% and 26.1%, respectively) and sun exposure (20.3% and 15.2%, respectively). Nevertheless, the association between smoking and development of actinic cheilitis and LSCC remains unclear [32,34,35]. Some authors suggest that cigarette smoking might have a role in the preferential occurrence of actinic cheilitis in the lower lip, specifically in the right side, because smokers hold cigarettes mostly in the right side of the lip, as most individuals are right-handed [24,35]. Also, lips are directly exposed to the

carcinogens of tobacco, which may therefore contribute to the AC and LSCC pathogenesis [32,34,35].

Actinic cheilitis is preventable by reducing sun exposure periods, applying lip sunscreen, and wearing wide-brimmed hat whenever being exposed to sun light [8]. It is crucial to raise awareness about actinic cheilitis and its progression to LSCC, especially for groups at increased risk such as farm workers, fishermen, and street vendors [9,36]. Some researchers reported a rate of 95% of LSCC arising as a progression of actinic cheilitis [21]. The malignant transformation to LSCC is considered slow, with some studies reporting a time period from 1 to 30 years [7,14]. The differential clinical diagnosis between actinic cheilitis and early LSCC stages is challenging, since the clinical appearance of LSCC in initial stages can resemble actinic cheilitis [6,34].

Due to the nature of this study design, some limitations are present. In this context, it was not possible to assess the prognosis and recurrence rates after treatment as there was no information regarding follow-up of patients. Moreover, it is important to notice that approximately 84.0% of Santa Catarina's population are fair-skinned, whereas the average of fair-skinned population in Brazil is 47.7% [37]. Therefore, the prevalence of lip lesions in the present study cannot be inferred to other states or countries since it might not reflect the socioeconomic context of other populations [9,38].

5. Conclusions

Lip diseases had an elevated prevalence among other oral pathologies in the main study. Reactive lesions and salivary gland disorders were the prevailing among all cases, along with epithelial conditions, and malignant neoplasms in the present study. Lip diseases affected mostly the lower lip of fair-skinned patients in the main study. These data were similar to findings from the literature review. It is important to emphasize that elderly males, fair-skinned, with habits of chronic sun exposure and smoking were the most affected patients by actinic cheilitis and LSCC. The knowledge provided by this analysis can contribute to the prevention and early diagnosis of lip lesions.

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Tables

Table 1. Distribution of lip lesions diagnosed at the Oral Pathology Laboratory, UFSC, Brazil, from 2006 to 2021, according to the histopathological diagnosis and sex reported.

Histopathological Diagnosis	Sex		
	Female	Male	Total
	n (%)	n (%)	n (%)
Reactive lesions	178 (74.0%)	62 (26.0%)	240 (100%)
Fibroma/IFH	160 (74.1%)	56 (25.9%)	216 (100%)
Oral pyogenic granuloma	16 (80.0%)	4 (20.0%)	20 (100%)
Giant cell fibroma	2 (50.0%)	2 (50.0%)	4 (100%)
Salivary gland disorders	93 (46.3%)	108 (53.7%)	201 (100%)
Mucocele	80 (47.9%)	87 (52.1%)	167 (100%)
Sialadenitis	8 (33.3%)	16 (66.7%)	24 (100%)
Sialolithiasis	1 (33.3%)	2 (66.7%)	3 (100%)
Mucous retention cyst	2 (40.0%)	3 (60.0%)	5 (100%)
Inverted ductal papilloma	1 (100%)	(0.0%)	1 (100%)
Sialadenoma papilliferum	1 (100%)	(0.0%)	1 (100%)
Epithelial conditions	50 (32.7%)	105 (67.7%)	155 (100%)
Actinic cheilitis	50 (32.7%)	65 (80.2%)	81 (100%)
Keratoacanthoma	(0.0%)	2 (100%)	2 (100%)
Malignant neoplasms	12 (23.5%)	39 (76.5%)	51 (100%)
Lip squamous cell carcinoma	10 (21.7%)	36 (78.3%)	46 (100%)
Large cell lymphoid neoplasia	(0.0%)	1 (100%)	1 (100%)
Verrucous carcinoma	(0.0%)	1 (100%)	1 (100%)
Rhabdomyosarcoma	(0.0%)	1 (100%)	1 (100%)
Adenoid cystic carcinoma	1 (100%)	(0.0%)	1 (100%)
Salivary gland secretory carcinoma	1 (100%)	(0.0%)	1 (100%)
Infectious diseases	22 (50.0%)	22 (50.0%)	44 (100%)
Squamous cell papilloma	8 (40.0%)	12 (60.0%)	20 (100%)
Condyloma acuminata	4 (66.7%)	2 (33.3%)	6 (100%)
Verruca vulgaris	4 (66.7%)	2 (33.3%)	6 (100%)
Candidiasis	1 (33.3%)	2 (66.7%)	3 (100%)
Paracoccidioidomycosis	1 (25.0%)	3 (75.0%)	4 (100%)
Syphilis	(0.0%)	1 (100%)	1 (100%)
Heck's disease	4 (100%)	(0.0%)	4 (100%)

Table 1. (continued)

Histopathological Diagnosis	Sex		
	Female	Male	Total
	n (%)	n (%)	n (%)
Benign neoplasms	17 (53.1%)	15 (46.9%)	32 (100%)
Hemangioma	6 (50.0%)	6 (50.0%)	12 (100%)
Pleomorphic adenoma	4 (80.0%)	1 (20.0%)	5 (100%)
Fibrolipoma	2 (100%)	(0.0%)	2 (100%)
Lipoma	1 (50.0%)	1 (50.0%)	2 (100%)
Neuroma	1 (33.3%)	2 (66.7%)	3 (100%)
Angioleiomyoma	(0.0%)	1 (100%)	1 (100%)
Lymphangioma	(0.0%)	2 (100%)	2 (100%)
Neurilemmoma	1 (50.0%)	1 (50.0%)	2 (100%)
Neurofibroma	(0.0%)	1 (100%)	1 (100%)
Basal cell adenoma	1 (100%)	(0.0%)	1 (100%)
Canalicular adenoma	1 (100%)	(0.0%)	1 (100%)
Autoimmune diseases	18 (90.0%)	2 (10.0%)	20 (100%)
Sjögren's syndrome	14 (87.5%)	2 (12.5%)	16 (100%)
Lichen planus	3 (100%)	(0.0%)	3 (100%)
Pemphigus vulgaris	1 (100%)	(0.0%)	1 (100%)
Pigmented lesions	10 (83.3%)	2 (16.7%)	12 (100%)
Melanotic macule	7 (77.8%)	2 (22.2%)	9 (100%)
Nevus	2 (100%)	(0.0%)	2 (100%)
Amalgam tattoo	1 (100%)	(0.0%)	1 (100%)
Other	29 (54.7%)	24 (45.3%)	53 (100%)
Nonspecific chronic inflammation	16 (50.0%)	16 (50.0%)	32 (100%)
Epidermoid cyst	(0.0%)	1 (100%)	1 (100%)
Other*	13 (65.0%)	7 (35.0%)	20 (100%)
Total	429 (53.1%)	379 (46.9%)	808 (100%)

Legend: IFH= Inflammatory fibrous hyperplasia; n= number of patients; UFSC= Federal University of Santa Catarina. *Other= Chronic interface mucositis (n= 4); Fistula (n= 2); Granulation tissue (n= 2); Hemorrhagic areas (n= 1); Normal nervous tissue (n= 1); Normal salivary glands (n= 3); Ossifying fibromyxoid tumor (non-ossifying variant) (n= 1); Reactive lymphoid hyperplasia (n= 1); Thrombus (n= 4); Xanthoma cell proliferation (n= 1). * UFSC= Federal University of Santa Catarina. Source: Data collected from patients' records from the Oral Pathology Laboratory — UFSC, Brazil.

Table 2. Distribution of individuals diagnosed at the Oral Pathology Laboratory, UFSC, Brazil, from 2006 to 2021, according to histopathological diagnosis, ethnicity, and location.

Histopathological Diagnosis	Ethnicity				Location					
	Fair-skinned	Dark-skinned	Others	NI	Lower lip	Upper lip	Commissure	Upper and lower lip	NI	Total
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Reactive lesions	177 (73.8%)	15 (6.2%)	10 (4.2%)	38 (15.8%)	140 (58.3%)	53 (22.1%)	29 (12.1%)	0 (0.0%)	18 (7.5%)	240 (100%)
Salivary gland disorders	141 (70.1%)	16 (8.0%)	7 (3.5%)	38 (18.9%)	187 (93.0%)	11 (5.5%)	0 (0.0%)	0 (0.0%)	3 (1.5%)	201 (100%)
Epithelial conditions	131 (84.5%)	1 (0.6%)	4 (2.6%)	19 (12.3%)	131 (84.5%)	10 (6.5%)	10 (6.5%)	0 (0.0%)	4 (2.6%)	155 (100%)
Malignant neoplasms	40 (78.4%)	(0.0%)	(0.0%)	10 (19.6%)	46 (90.2%)	3 (5.9%)	0 (0.0%)	0 (0.0%)	2 (3.9%)	51 (100%)
Infectious diseases	32 (72.7%)	5 (11.4%)	5 (11.4%)	2 (4.5%)	17 (38.6%)	12 (27.3%)	14 (31.8%)	0 (0.0%)	1 (2.3%)	44 (100%)
Benign neoplasms	23 (77.9%)	4 (12.5%)	2 (6.3%)	3 (9.4%)	20 (62.5%)	12 (37.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	32 (100%)
Autoimmune diseases	13 (65.0%)	2 (10.0%)	1 (5.0%)	4 (20.0%)	15 (75.0%)	3 (15.0%)	0 (0.0%)	0 (0.0%)	2 (10.0%)	20 (100%)
Pigmented lesions	10 (83.3%)	(0.0%)	(0.0%)	2 (16.7%)	8 (66.7%)	4 (33.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (100%)
Other	40 (75.5%)	4 (7.5%)	2 (3.8%)	7 (13.2%)	35 (66.0%)	13 (24.5%)	3 (5.7%)	1 (1.9%)	1 (1.9%)	53 (100%)
Total	607 (75.1%)	47 (5.8%)	31 (3.8%)	123 (15.2%)	599 (74.1%)	120 (14.9%)	56 (6.9%)	1 (0.1%)	32 (4.0%)	808 (100%)

Legend: n= number of patients; NI= not informed; UFSC= Federal University of Santa Catarina. Source: Data collected from patients' records from the Oral Pathology Laboratory UFSC. Brazil.

Table 3. Distribution of individuals diagnosed at the Oral Pathology Laboratory, UFSC, Brazil, from 2006 to 2021, according to the histopathological diagnosis and age group.

Histopathological Diagnosis	Age groups										Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	NI	
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	
Reactive lesions	3 (1.3%)	11 (4.6%)	7 (2.9%)	20 (8.3%)	45 (18.8%)	75 (31.3%)	54 (22.5%)	11 (4.6%)	3 (1.2%)	11 (4.6%)	240 (100%)
Salivary gland disorders	24 (11.9%)	50 (24.9%)	58 (28.9%)	32 (15.9%)	14 (7.0%)	10 (5.0%)	7 (3.5%)	0 (0.0%)	0 (0.0%)	6 (3.0%)	201 (100%)
Epithelial conditions	1 (0.6%)	0 (0.0%)	6 (3.9%)	12 (7.7%)	33 (21.3%)	50 (32.3%)	33 (21.3%)	14 (9.0%)	1 (0.6%)	5 (3.2%)	155 (100%)
Malignant neoplasms	1 (2.0%)	0 (0.0%)	2 (3.9%)	2 (3.9%)	5 (9.8%)	12 (23.5%)	15 (29.4%)	7 (13.7%)	1 (2.0%)	6 (11.8%)	51 (100%)
Infectious diseases	4 (9.1%)	7 (15.9%)	6 (13.6%)	7 (15.9%)	9 (20.5%)	5 (11.4%)	4 (9.1%)	2 (4.5%)	0 (0.0%)	0 (0.0%)	44 (100%)
Benign neoplasms	2 (6.3%)	2 (6.3%)	4 (12.5%)	7 (21.9%)	5 (15.6%)	7 (21.9%)	3 (9.4%)	2 (6.3%)	0 (0.0%)	0 (0.0%)	32 (100%)
Autoimmune diseases	0 (0.0%)	0 (0.0%)	2 (10.0%)	1 (5.0%)	6 (30.0%)	7 (35.0%)	4 (20.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	20 (100%)
Pigmented lesions	0 (0.0%)	0 (0.0%)	3 (25.0%)	1 (8.3%)	2 (16.7%)	2 (16.7%)	3 (25.0%)	1 (8.3%)	0 (0.0%)	0 (0.0%)	12 (100%)
Other	4 (7.5%)	7 (13.2%)	7 (13.2%)	5 (9.4%)	7 (13.2%)	12 (22.6%)	6 (11.3%)	3 (5.7%)	0 (0.0%)	2 (3.8%)	53 (100%)
Total	39 (4.8%)	77 (9.5%)	95 (11.8%)	87 (10.8%)	126 (15.6%)	180 (22.3%)	129 (16.0%)	40 (5.0%)	5 (0.6%)	30 (3.7%)	808 (100%)

Legend: n= number of patients; NI= not informed; UFSC= Federal University of Santa Catarina. Source: Data collected from patients' records from the Oral Pathology Laboratory — UFSC, Brazil.

Table 4. Descriptive characteristics and main findings of included articles from literature review (April 16, 2022).

Author, year; country	Total sample/n of lip lesions (%)	Gender (n/%)	Diagnostic categories* (n/%)	Predominant lip lesions* (n/%)
Main study, 2021; Brazil	4289/808 (18.8%)	F (429/53.1%)	AD (20/2.5%)	AC (153/18.9%)
		M (379/46.9%)	BN (32/4.0%)	FIFH (216/26.7%)
			ID (44/5.4%)	LSCC (46/5.7%)
			MN (51/6.3%)	MU (167/20.7%)
			EC (155/19.2%)	NCI (32/4.0%)
			Other (53/6.6%)	
			PL (12/1.5%)	
			RL (240/29.7%)	
			SGD (201/24.9%)	
Barros, 2020; Brazil	5511/587 (10.7%)	F (306/52.1%)	AD (35/6.0%)	AC (136/23.2%)
		M (281/47.9%)	BN (11/1.9%)	CA (25/4.3%)
			ID (65/11.1%)	FIFH (52/8.9%)
			MN (17/2.9%)	LSCC (16/2.7%)
			EC (152/25.9%)	MU (147/25.0%)
			Other (72/12.3%)	VL (51/8.7%)
			PL (25/4.3%)	
			RL (62/10.6%)	
			SGD (148/25.2%)	

Table 4. (continued)

Author, year; country	Total sample/n of lip lesions (%)	Gender (n/%)	Diagnostic categories* (n/%)	Predominant lip lesions* (n/%)
Curra, 2016; Brazil	26920/1193 (4.4%)	F (631/52.9%)	AD (9/0.8%)	AC (135/11.3%)
		M (562/47.1%)	BN (73/6.1%)	FIFH (282/23.6%)
			ID (71/6.0%)	LSCC (47/3.9%)
			MN (53/4.4%)	MU (453/38.0%)
			EC (141/11.8%)	SCP (51/4.3%)
			Other (45/3.8%)	
			PL (15/1.3%)	
			RL (321/26.9%)	
SGD (465/39.0%)				
Osterne, 2011; Brazil	6231/1021 (16.4%)	F (510/50.0%)	AD (26/2.5%)	AC (98/9.6%)
		M (511/50.0%)	BN (123/12.0%)	FIFH (263/25.8%)
			ID (49/4.8%)	HE (101/9.9%)
			MN (112/11.0%)	LSCC (106/10.4%)
			EC (100/9.8%)	MU (294/28.8%)
			PL (24/2.4%)	
			RL (293/28.7%)	
			SGD (294/28.8%)	

Legend: *= according to main study classification; AC= Actinic cheilitis; AD= Autoimmune diseases; BN= Benign neoplasms; CA= Candidiasis; EC= Epithelial conditions; FIFH= Fibroma/Inflammatory fibrous hyperplasia; HE= Hemangioma; ID= Infectious diseases; LSCC= Lip squamous cell carcinoma; MN= Malignant neoplasms; MU= Mucocele; n= number of cases; NCI= Nonspecific chronic inflammation; PL= Pigmented lesions; RL= Reactive lesions; SCP= Squamous cell papilloma; SGD= Salivary gland disorders; VL= Vascular lesions.

4 CONSIDERAÇÕES FINAIS

As doenças labiais apresentaram elevada prevalência entre as patologias orais no presente estudo. Lesões reativas e distúrbios de glândulas salivares predominaram entre todos os casos no estudo principal. As condições epiteliais e as neoplasias malignas também mostraram alta prevalência no presente estudo. As lesões em lábio acometeram principalmente o lábio inferior e indivíduos leucodermas no estudo principal. Os resultados encontrados no presente estudo foram similares aos resultados encontrados na revisão de literatura. É importante ressaltar que homens mais velhos, leucodermas, com hábito de exposição solar crônica e tabagismo foram os pacientes mais afetados pela queilite actínica e pelo carcinoma epidermoide de lábio. O conhecimento fornecido por este estudo pode contribuir para a prevenção e diagnóstico precoce de lesões em lábio.

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ANEXO A – ATA DA DEFESA



UNIVERSIDADE FEDERAL DE SANTA CATARINA
CENTRO DE CIÊNCIAS DA SAÚDE
CURSO DE ODONTOLOGIA
DISCIPLINA DE TRABALHO DE CONCLUSÃO DE CURSO DE ODONTOLOGIA

ATA DE APRESENTAÇÃO DO TRABALHO DE CONCLUSÃO DE CURSO

Aos vinte e nove dias do mês de junho de 2022, às quatorze horas, em sessão pública de forma remota online, via plataforma RNP (Rede Nacional de Ensino e Pesquisa), pelo serviço *Conferênciaweb* desta Universidade, na presença da Banca Examinadora presidida pela Professora Dra Elena Riet Correa Rivero e pelos examinadores:


1 - Gilberto De Souza Melo,

2 - Nicole Lonni Nascimento,


a aluna Mayara de Castro Miranda apresentou o Trabalho de Conclusão de Curso de Graduação intitulado: "Levantamento epidemiológico de lesões em lábio: estudo retrospectivo" como requisito curricular indispensável à aprovação na Disciplina de Defesa do TCC e a integralização do Curso de Graduação em Odontologia. A Banca Examinadora, após reunião em sessão reservada, deliberou e decidiu pela **APROVAÇÃO** do referido Trabalho de Conclusão do Curso, divulgando o resultado formalmente ao aluno e aos demais presentes, e eu, na qualidade de presidente da Banca, lavrei a presente ata que será assinada por mim, pelos demais componentes da Banca Examinadora e pelo aluno orientando.

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ANEXO B – NORMAS DA REVISTA

GUIDE FOR AUTHORS

INTRODUCTION

Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology is the official journal of the Asian Association of Oral and Maxillofacial Surgeons, the Asian Society of Oral and Maxillofacial Pathology, and the Japanese Society of Oral Pathology, as well as the official English-language journal of the Japanese Society of Oral and Maxillofacial Surgeons, the Japanese Society of Oral Medicine, and the Japanese Academy of Maxillofacial Implants.

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All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. See also <https://www.elsevier.com/conflictsofinterest>. Further information and an example of a Conflict of Interest form can be found at: https://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing.

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ANEXO C - PARECER CONSUBSTANCIADO DO CEPUNIVERSIDADE FEDERAL DE
SANTA CATARINA - UFSC**PARECER CONSUBSTANCIADO DO CEP****DADOS DO PROJETO DE PESQUISA**

Título da Pesquisa: Levantamento das doenças bucais diagnosticadas pelo Laboratório de Patologia Bucal da Universidade Federal de Santa Catarina

Pesquisador: Elena Riet Correa Rivero

Área Temática:

Versão: 2

CAAE: 42095715.1.0000.0121

Instituição Proponente: Departamento de Patologia

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 1.097.375

Data da Relatoria: 08/06/2015

Apresentação do Projeto:

Estudo de Rivero que pretende, sem TCLE, avaliar o resultado de cerca de 2500 biópsias do Departamento de Patologia Bucal da UFSC, coletados desde 2006 no registro prévio que é feito no relatório anual das atividades desenvolvidas no LPB.

Objetivo da Pesquisa:

Segundo os autores, o estudo tem como objetivo primário "conhecer a prevalência das lesões diagnosticadas pelo Laboratório de Patologia Bucal da UFSC (LPB-UFSC)", e como objetivo secundário "para as lesões mais prevalentes dentro da casuística do LPB será realizado o levantamento anual do arquivo de casos de forma periódica e sistematizada, determinando-se, para cada doença (ou grupo de doenças): • Determinação do perfil sócio-demográfico da população acometida; • Determinação do o perfil clínico dos pacientes acometidos; • Determinação das principais características clínicas das lesões; • Determinação dos fatores etiológicos; A apresentação desses dados também será feita de forma anual em eventos científicos (como o SEPEX-UFSC, a Reunião da Sociedade Brasileira de Estomatologia e Patologia Oral, entre outros) e sociais da área (como nas campanhas de prevenção e diagnóstico precoce das doenças da boca, promovidas pela entidade de classe da odontologia e da medicina)."

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Avaliação dos Riscos e Benefícios:

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Comentários e Considerações sobre a Pesquisa:

Pode contribuir sobre o conhecimento generalizável sobre o tema. Os autores esclareceram que outros estudos já foram desenvolvidos na amostra.

Considerações sobre os Termos de apresentação obrigatória:

Pede dispensa de TCLE de acordo com os seguintes motivos:

1. Este é um projeto de interesse social que objetiva conhecer a prevalência das lesões diagnosticadas pelo Laboratório de Patologia Bucal da UFSC (LPB-UFSC), o qual é referência no Estado de Santa Catarina no diagnóstico de doenças da boca. O conhecimento com relação à incidência das doenças bucais no Estado de Santa Catarina irá possibilitar a elaboração de estratégias de prevenção por órgãos governamentais, assim como a elaboração de futuros estudos de pesquisa baseados nessa incidência; 2. Uma vez que o LPB iniciou suas atividades em 2006, alguns desses casos tem mais de 9 anos de diagnóstico. Devido a isso, existe a possibilidade de alguns pacientes já terem ido a óbito; 3. Até dezembro de 2014 havia mais de 2200 casos diagnosticados pelo LPB; 4. Os casos diagnosticados pelo LPB não provêm apenas da cidade de Florianópolis. Diversos casos são oriundos de outras regiões do Estado como Curitiba, São José, Imbituba, Rio do Sul e Ibirama. 5. O levantamento dos casos diagnosticados será realizado a partir do registro prévio que é feito no relatório anual das atividades desenvolvidas no LPB. Esse registro é feito em planilha Excel no qual constam os dados presentes nas fichas de biópsia que chegam ao LPB (anexo 1): Dados do paciente (sexo, etnia, idade, profissão); Tipo de lesão (superficial, submucosa, subcutânea, intra-óssea); Localização da lesão; Características clínicas da lesão; História clínica do caso; Outras informações (portador de prótese, fumo, álcool, linfadenopatia etc.); Diagnóstico clínico; Tipo de biópsia (incisional, excisional, curetagem, aspiração, peça cirúrgica); Procedência. Nessa planilha também consta o diagnóstico histológico final, que é coletado a partir dos laudos (anexo 2). Ressaltamos que nesta planilha não consta nome ou qualquer registro (hospitalar ou próprio do LPB) que possibilite a identificação dos pacientes, sendo mantida, dessa forma, o anonimato dos mesmos.

Recomendações:

Sugerimos que novo projeto seja enviado, com TCLE, para inclusão prospectiva dos novos casos em estudos futuros.

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Continuação do Parecer: 1.097.375

Conclusões ou Pendências e Lista de Inadequações:

Pendências resolvidas.

Situação do Parecer:

Aprovado

Necessita Apreciação da CONEP:

Não

Considerações Finais a critério do CEP:

FLORIANOPOLIS, 08 de Junho de 2015

Assinado por:
Washington Portela de Souza
(Coordenador)