DOI: https://doi.org/10.53350/pjmhs2023172120

ORIGINAL ARTICLE

Prevalence of Lip (Diseases/Disorders/Lesions) among adult Population Visiting Out-Patient Clinic in Central Punjab

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ABSTRACT

Aim: To find out the prevalence of various commonly occurring lip anomalies like lip fissures, angular chielitis, lip pits and allergic cheilitis in patients visiting out-patient clinic in central Punjab.
Methods: This is a prospective observational study conducted at the diagnostics department of Nishter institute of dentistry, Multan from Feb,2022 to December,2022 for a period of 11 months to determine the relative frequency of various lip anomalies in adult population of central Punjab. Six hundred patients were examined with an age range of 25-35 years in a quite comfortable environment using dental mirror, natural light and surgical gauze. The result was analyzed by using chi-square test in SPSS.
Results: The prevalence of lip anomalies in 600 patients was 24.3% among male and female patients. These lesions were more prevalent in patients of 25 to 30 years of age (55.47%) compared to 30-35 years of age (44.52%). Among lip lesions, lip fissures were seen in 7.4% cases, lip pits were 2.6%, allergic chielitis was seen 1.8% and patients with angular chielitis were 12.4%. All lesions showed almost equal distribution among male and female patients seen during the study.
Practical Implication: Our study was done in central Punjab region. It highlighted the commonly occurring lesions of lip which could affect the aesthetics of the people as well as has important psychological impact on their daily life. Our study showed the prevalence of lesions and also motivated the people to seek possible treatment of the lesions. It helped a lot to educate affected community and encouraged them to improve their conditions.
Conclusion: The results of the study are in accordance with some previous studies although they contradict to some other studies as well. This study has also shown that the lip anomalies are slightly more in females as compared to the males although the statistical difference is not significant. Moreover, the age is not related to the lip anomalies.
Keywords: Lip anomalies, Lip fissures, angular chielitis, allergic chielitis, lip pits.

INTRODUCTION

Lip is one of the most important structures in the oro-facial region providing functions like, speech, breathing etc. Lip is continuously exposed to various physical and chemical insults that can lead to various pathological conditions to be developed on the lips[1]. Moreover, it may be involved in various abnormalities that may be developmental, genetic or environmental in nature.

Many conditions are included in the term of lip anomalies. Some of them have less clinical significance being asymptomatic like morphological alterations while others have great clinical significance like lip lesions and developmental or congenital defects[2,3]. Lip anomalies are also associated with other syndromes as well like Melkerson- Rosentheal syndrome, Down syndrome etc.[4,5] The purpose of this study is to find out the prevalence of various lip anomalies found in adult population of central Punjab.

Lip pits: Lip pits are developmental defects or depressions found at the upper or lower lip. Lip pits are mostly present along the midline called para-median lip pits while some lip pits are present at the lip angles called commissural lip pits[6].

Lip fissures: Lip fissures are the cuts or cracks found on the surface of the lips and are mostly present in patients with oro-facial granulomatosis, Down's syndrome or candidal infections and may cause pain as well[7,8].

Allergic chielitis: Allergic chielitis can lead to some inflammation or selling in the lips in response to some allergens found in food, ointments, lipsticks, toothpaste etc[9,10].

Angular chielitis: Angular chielitis refer to the cracking of the angle of the lips and it is a multi-factorial disease. Deficiencies of Vit. C, iron deficiency, infections like candida, staph. Aureus etc can lead to this condition[11,12].

Received on 10-01-2023
Accepted on 25-02-2023

Our study was done in central Punjab region. A lot of people were seen on dental clinics routinely with lip lesions along with other dental problems. A study was planned to highlight the commonly occurring lesions of lip which was affecting the aesthetics of the people as well as had important psychological impact on their daily life. Our study showed the prevalence of lesions among male and female patients. It motivated the people to seek possible treatment of the lesions. It helped a lot to educate affected community and encouraged them to improve their conditions. As some previous studies were done related to such lesions but in other areas of country and world and particular area was not explored earlier.

Purpose of our study was also to increase awareness about disease or disorders of lip lesions and their possible improvement. Our study will open new study ideas to help communities to improve their quality of life both psychologically as well as aesthetically.

MATERIALS & METHODS

This was a prospective observational study conducted at the diagnostics department of Nishter Institute of Dentistry Multan, Pakistan, from Feb 2022 to December 2022, for a period of 11 months to determine the relative frequency of various lip anomalies in adult population of central Punjab. Six hundred patients were selected with randomized control sampling having an age range of 25-35 years. Among them 300 were males and 300 were females. Patients with an age range of 25-30 were placed in one group and the patients with an age range of 31-35 were placed in the second group. All the patients were examined after taking consent in the OPD (Out-patient department) using mouth mirror, light and examination gloves. The results were analyzed by using chi-square test in SPSS. Inclusion criteria: Patients with an age range of 25-35 years of wither gender having no other pathology,

malignancy or have not received any of the medication or therapies were included in the study. Exclusion Criteria: Patients having age less than 25 year, having any other pathology or malignancy, had received any other therapy or having mental retardation were excluded.

RESULTS

The total prevalence of lip anomalies in 600 patients (300 males and 300 females) was 146(24.3%). The prevalence of lip anomalies in our study population were (23.3%) in females as compared to males (22.6%) though the statistical difference was not significant as shown in Table 1.

Lip anomalies were found more in patients group having age range of 25 to 30 years with prevalence of 55.47% as compared to the other group having an age range of 30 to 35 years i.e., 44.52% as shown in figure 1.

Among lip lesions, lip fissures were observed 7.4% among our subjects with a slight predilection toward male but the statistical difference is non-significant. Angular chielitis was found 12.4% of our subjects and was equally distributed in males as well as females. Lip pits were found only in 2.6% of our population. Allergic chielitis was found in 1.8% in our subjects and was equally distributed among males and females

Table 1: Prevalence of Lip anomalies according to gender

Anomalies	Gender	
	Male	Female
Lip fissures	23(7.6%)	22(7.3%)
Angular Chielitis	37(12.4%)	37(12.4%)
Lip pits	8(2.6%)	8(2.6%)
Allergic Chielitis	5(1.8%)	5(1.8%)

Figure 1: Prevalence of lip anomalies according to age distribution

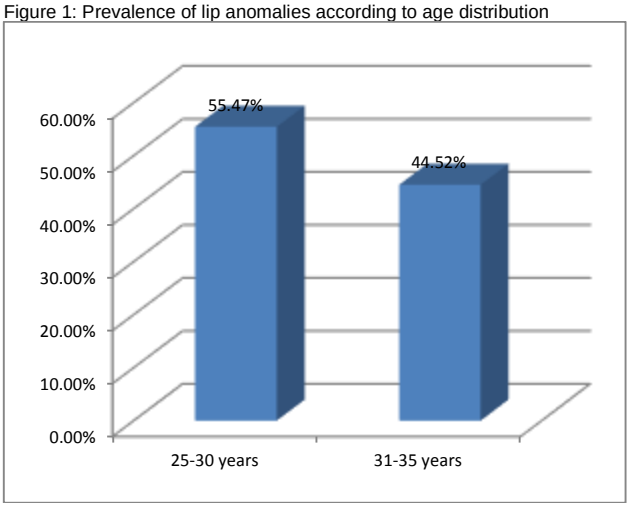
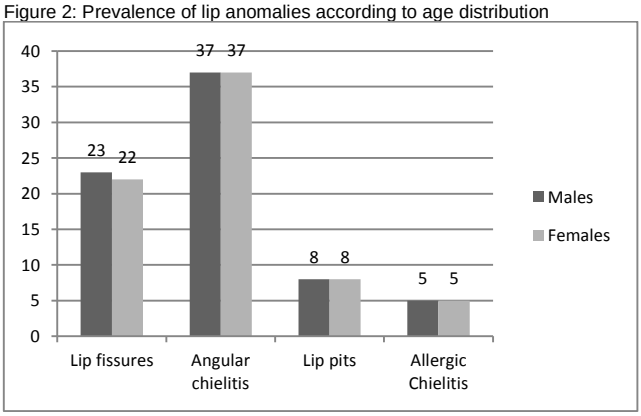


Figure 2: Prevalence of lip anomalies according to age distribution



DISCUSSION

Lip fissures were observed in 7.4% of the population having slight more predilections in males as compared to the females that is in correspondence with other study[13]. Although the exact etiology of the disease is still a matter of debate but factors like stress, environmental factors, dehydration etc are considered to be associated with lip fissures. No genetic predisposition has been found in this condition.[14]

Angular chielitis was found 12.4% of the population having no gender predilection and it is in conjunction with the findings of a previous study in 2013[15]. It is believed to be a multifactorial disease involving factors like microbes, nutritional deficiencies, ill fitted dentures etc. No genetic predispositionis found in this condition. According to the studies of Lugovic et al., Staph. aureus and candida are found associated with angular chielitis as causative microorganisms. Iron-deficiency anemia is also found in conjunction with angular chielitis according to a study[16].

Allergic chielitis was found to be 1.8% and has association with allergens like food, cosmetics and toothpaste as favored by other studies.[17]Allergens like stannous fluoride in toothpaste are found associated with allergic chielitis.[19]

The prevalence of lip pits in our population was 2.6% which was near to the prevalence of prevalence found in American population as evident in a previous study[18].

A lot of information have been gathered and analyzed by various investigators throughout the world with varying prevalence rates of various morphological variations of lips. The published data vary considerably may be due to different diagnostic criteria used in different races and different age groups.

CONCLUSION

Dental surgeons and other oral healthcare workers need to know about the prevalence and management of different lip disorders, anomalies and lesions of both developmental and acquired origin. Most of the conditions affecting the lips are symptomatic requiring management. Patients should be educated about these lip problems and advised to protect their lips along with teeth for better oral hygiene. Very few studies have been carried out in Pakistan regarding the prevalence of lip disorders, lesions and diseases and hence further studies with larger population should be carried out to determine the prevalence of lip disorders and factors responsible for producing these conditions.

Conflict of Interest: The study has no conflict of interest to declare by any author.

Ethical approval: It was granted by hospital Ethical Committee.

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