

Original Research

Assessment of Oral Mucosal Conditions in Geriatric Patients

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ABSTRACT:

Background: The aging population poses one of the greatest challenges to contemporary public health. The present study was conducted to assess oral mucosal conditions in geriatric patients. **Materials & Methods:** This study was conducted on 320 geriatric subjects of both genders. A thorough oral examination was performed in all patients. In all subjects, features of the lesion, anatomical location etc. was recorded. **Results:** Out of 320 subjects, males were 180 and females were 140. Mucosal lesions were angular cheilitis in 25%, leukoplakia in 12%, OSMF in 17%, traumatic ulcer in 39%, mucocele in 12%, lichen planus in 40%, candidiasis in 16%, fibroma in 5% and fissured tongue in 18% of subjects. The difference was significant ($P < 0.05$). **Conclusion:** Authors found that common mucosal lesions were angular cheilitis leukoplakia, OSMF, traumatic ulcer, mucocele, lichen planus, candidiasis, fibroma and fissured tongue.

Key words: Geriatric, Leukoplakia, Lichen planus.

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INTRODUCTION

The aging population poses one of the greatest challenges to contemporary public health, especially in developing countries, where this phenomenon occurs in an environment of poverty and great social inequality. In dentistry, one concern is the maintenance of oral health of elderly patients, who are subject to the influence of a series of factors that make them susceptible to various diseases, not only in the teeth but also in the different structures that compose the Stomatognathic system.¹

Oral health is important to the quality of life of individuals of all age groups.² Oral lesions can lead to interference of daily activities due to discomfort or pain that interferes with mastication, swallowing, and speech, producing additional symptoms such as halitosis, xerostomia, or oral dysesthesia, which hampers an individual's daily social activities. As has been established by the WHO, a population aging more than 60

years old should be considered, to be an elderly population. The last national census of population conducted in India in 2011 showed that 8.6% of the population was 60 years or more.³

Poor oral health is often associated with lower economic status; lack of dental insurance; being homebound or institutionalized; and the presence of physical disabilities that limit good oral hygiene, such as arthritis and neurologic impairment. Because older patients are more likely to visit a physician than a dentist, primary care physicians have an opportunity to improve oral health in this population by assessing oral health risk, identifying and treating common oral conditions, and referring patients to a dentist, if needed.⁴ The present study was conducted to assess oral mucosal conditions in geriatric patients.

MATERIALS & METHODS

This study was conducted comprised of 320 geriatric subjects of both genders. Ethical clearance was taken prior to the study. All patients were informed and written consent was obtained.

General information such as name, age, gender etc was recorded. A thorough oral examination was performed in all patients. In all subjects, features of the lesion, anatomical location etc. was recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Graph I Distribution of patients

Total- 320		
Gender	Male	Female
Number	180	140

Table I, graph I shows that out of 320 subjects, males were 180 and females were 140.

Graph I Distribution of patients

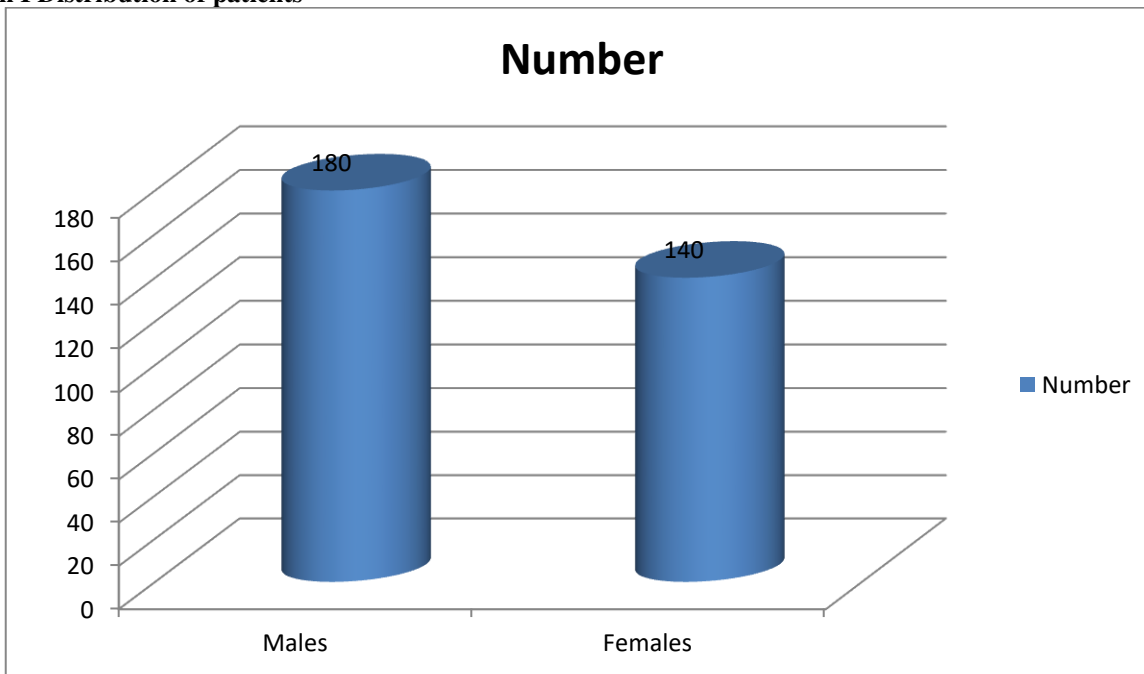


Table II Different mucosal lesion in subjects

Mucosal lesion	Percentage	P value
Angular cheilitis	25%	0.01
Leukoplakia	12%	
OSMF	17%	
Traumatic ulcer	39%	
Mucocele	12%	
Lichen planus	40%	
Candidiasis	16%	
Fibroma	5%	
Fissured tongue	18%	

Table II, graph II shows that mucosal lesions were angular cheilitis in 25%, leukoplakia in 12%, OSMF in 17%, traumatic ulcer in 39%, mucocele in 12%, lichen planus in 40%, candidiasis in 16%, fibroma in 5% and fissured tongue in 18% of subjects. The difference was significant (P < 0.05).

Graph II Mucosal lesion in subjects

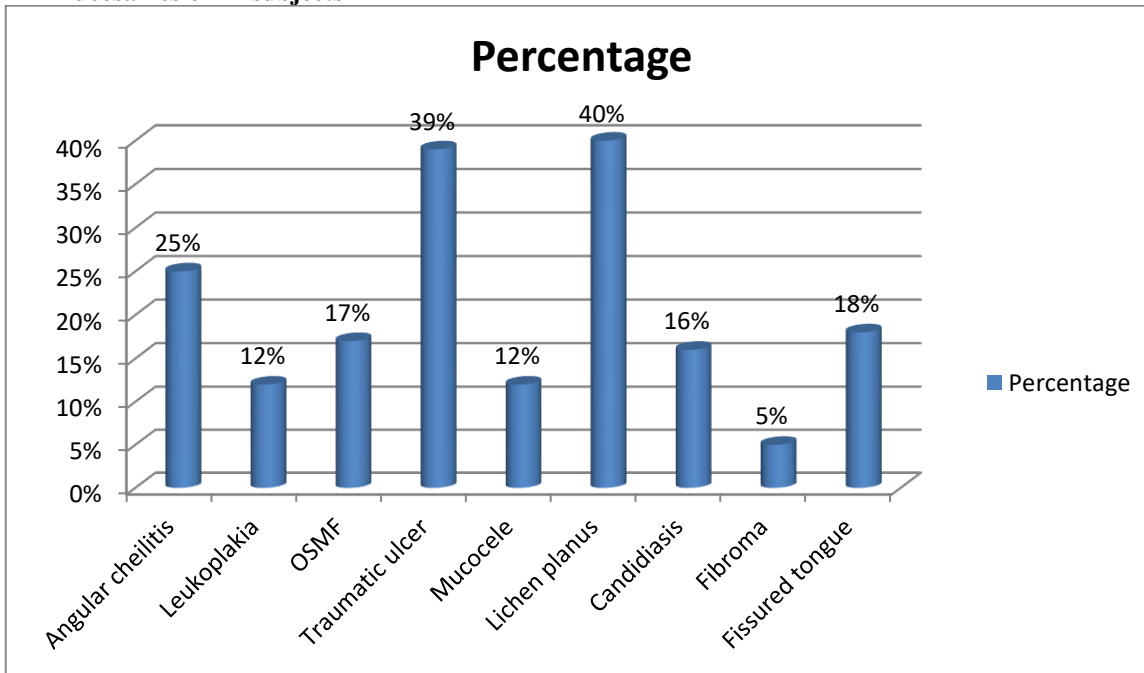


Table III Site distribution

Site	Percentage	P value
Gingiva	12%	0.05
Buccal mucosa	38%	
Soft palate	17%	
Lip	27%	
Tongue	4%	
Floor of mouth	3%	

Table III, graph III shows that common site was buccal mucosa seen in 38%, lip in 27%, soft palate in 17%, gingiva in 12%, tongue in 4% and floor of mouth in 3%. The difference was significant (P < 0.05).

DISCUSSION

Oral mucosal lesion (OML) is known as any abnormal alteration in color, surface aspect, swelling, or loss of integrity of the oral mucosal surface. Although a proportion of OMLs are benign and require no active treatment, some may present with significant pathology.⁵ Of particular importance are oral potentially malignant disorders which may progress into malignancy. Besides, OMLs can interfere with daily quality of life in affected patients through impacts on mastication, swallowing, and speech with symptoms of burning, irritation, and pain. OMLs have many etiologies as bacterial or viral or fungal infections, local trauma or irritation, systemic diseases, and excessive consumption of tobacco, betel quid, and alcohol.⁶

Epidemiologic studies may promote an important view for the understanding of the prevalence, extent, and severity of oral diseases in the aging population. Nevertheless, there are still a limited number of studies in the literature addressing diagnosis and identification of

the prevalence of lesions in the oral mucosa of the elderly population, when oral lesions are the object of the study, the focus is only on cancer of the mouth.⁷

According to different investigations, is a common finding to observe oral pluripathology in the elderly. This could be explained due to the systemic complexity involvement in these patients, aging process, metabolic changes, nutritional factors, medications, prosthetic use, psychobiological habits and alcohol or tobacco use; therefore, several conditions should be encounter in this particular age group; these include neoplasms, infections, immunological, hematological and systemic disorders, leading to oral pain and discomfort in the major adult patient.⁸ The present study was conducted to assess oral mucosal conditions in geriatric patients.

In present study, out of 320 subjects, males were 180 and females were 140. We found that mucosal lesions were angular cheilitis in 25%, leukoplakia in 12%, OSMF in 17%, traumatic ulcer in 39%, mucocele in

12%, lichen planus in 40%, candidiasis in 16%, fibroma in 5% and fissured tongue in 18% of subjects.

Mujica et al⁹ found that 64% of the patients presented with one or more oral lesions, associated to tobacco, betel nut consumption, and lesions secondary to trauma and prosthesis. Males were more affected than females and this difference was clinically not significant. The lesions were more frequently observed between 65 to 70 yrs. The most common alterations observed were smoker's palate (43%), denture stomatitis (34%), oral submucous fibrosis (30%), frictional keratosis (23%), leukoplakia (22%), and pyogenic granuloma (22%). Hard palate was the most commonly affected site (23.1%).

The length of denture use and diabetes mellitus can be considered as significant risk factors for denture stomatitis and denture hyperplasia. Some important associations between denture-related lesions, systemic diseases, and medication use which require further investigation has also been observed. Kovac¹⁰ found that the prevalence of habits in Indian population was 51.4% including both the sexes, and the prevalence of OMLs was 9.9%. The oral lesions were more frequently observed between 65 and 70 years. The mean age of a large portion of OMLs, such as fissured tongue, lingual papillitis, candidiasis, lichen planus, melanin pigmentation, and burning mouth syndrome, was over 60 years old.

CONCLUSION

Authors found that common mucosal lesions were angular cheilitis leukoplakia, OSMF, traumatic ulcer, mucocele, lichen planus, candidiasis, fibroma and fissured tongue.

REFERENCES

1. Corrêa L, Frigerio ML, Sousa SC, et al. Oral lesions in elderly population: a biopsy survey using 2250 histopathological records. *Gerodontology*. 2006;23(1):48–54.
2. Fleishman R, Peles DB, Pisanti S. Oral mucosal lesions among elderly in Israel. *J Dent Res*. 1985;64(5):831–36.
3. Crivelli MR, Domínguez FV, Adler IL, et al. Frequency and distribution of oral lesions in elderly patients. *Rev Asoc Odontol Argent*. 1990;78(1):55–58.
4. Dehler K, Brannon R, Muzyka B. Biopsed oral lesions in a geriatric population [abstract]. *Oral Surg Oral Med Oral Pat*. 2003;95(4):417.
5. Shulman JD, Beach MM, Rivera-Hidalgo F. The prevalence of oral mucosal lesions in U.S. adults: data from the Third National Health and Nutrition Examination Survey, 1988–1994. *J Am Dent Assoc*. 2004;135(9):1279–86.
6. Ikeda N, Handa Y, Khim SP, et al. Prevalence study of oral mucosal lesions in a selected Cambodian population. *Community Dent Oral Epidemiol*. 1995;23(1):49–54.
7. Corbet EF, Holmgren CJ, Phillipsen HP. Oral mucosal lesions in 65-74-year-old Hong Kong Chinese. *Community Dent Oral Epidemiol*. 1994;22(5):392–95.

8. Lin HC, Corbet EF, Lo EC. Oral mucosal lesions in adult Chinese. *J Dent Res*. 2001;80(5):1486–90.
9. Mujica V, Rivera H, Carrero M. Prevalence of oral soft tissue lesions in an elderly Venezuelan population. *Med Oral Patol Oral Cir Bucal*. 2008;13(5):E270–74.
10. Kovac-Kovacic M, Skaleric U. The prevalence of oral mucosal lesions in a population in Ljubljana, Slovenia. *J Oral Pathol Med*. 2000;29(7):331–35.