DIFFERENT LOCATIONS OF OROFACIAL PAIN AND ITS ASSOCIATION WITH AGE AND GENDER AT ISRA DENTAL COLLEGE, HYDERABAD

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ABSTRACT

Objective: To determine the different locations of orofacial pain and its association with age and gender among patients presented at Isra dental College, Hyderabad

MaterialsandMethods: This observational study took place at Isra Dental College, Hyderabad. Study duration was 6 months from august 2018 January 2019. All the patients presented with age more than 12 years, orofacial pain and either of gender was included. Patients were interviewed regarding demographic information including duration and location of the pain. All the data was recorded in self-made proforma.

Results: Total 710 patients were studied; most common age groups were 31-40 years for 26.3% cases, followed by 41-50 years for 25.9% cases. Females were 52.0% and males were 48.0%.Teeth pain was most common in 78.6% patients, followed by inside mouth pain in 12.1%, face pain in 8.6% patients and headache in 0.7% cases. Most of the patients (63.8%) presented with acute pain. No significant variance was found in orofacial pain according to age and gender; p-values were quite insignificant.

Conclusion: It was concluded that most common pain location was tooth. Additionally, no significant variance was seen in Age and gender in terms of orofacial pain locations.

Key words: Orofacial pain, locations, age, gender

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INTRODUCTION

In dentistry, Orofacial pain implies to the identification and administration of complex and chronic, oromotor disorders and facial pain.[1]It plays a substantial role in morbidity and utilization of healthcare services. It involves rather frequently reported conditions including temporomandibular medical conditions and toothache, and relatively uncommon syndromes of orofacial pain.[1]Over the past few years, medical research regarding orofacial pain conditions has accelerated. With distinctive expertise in handling orofacial pain conditions, a new clinical subject area is evolving. It implies that pain is regulated by complex neural systems designed for that function and denotes pain as a way to defend against physical damage.[1,2] Orofacial pain is a relatively common and deteriorating condition that involves the head, neck and face.[3] Because the orofacial system is complicated, these disorders pose a serious threat to the doctors, and thus discomfort may occur from several causes.[4] Modern research reveals the implication of glial cells in orofacial inflammation and trigeminal nerve damage, which are to be associated with

inflammatory orofacial pain conditions.[5] Approximately 65% of affected patients suffer from orofacial pain.[6] Female gender is more predisposed, with greater prevalence in the age group of 19-40 years, as well as duration for Temporomandibular joint dysfunctions (TMD) and mean age have been similar among both groups.[7]Epidemiological findings suggest that females suffer more frequently from pain due to headache and TMD than the males.[8] The incidence of pain complaints is generally decreased in older ages in comparison to younger ages.[8,9]For optimal diagnosis, the clinician requires strong understanding of the factors associated to pain that emerges from orofacial structures as well as an interdisciplinary intervention approach is highly preferred.[4]Because of pathophysiology, complicated histories and related psychosocial comorbidities (including anxiety and depression), it could be challenging to diagnose and manage an orofacial pain.[10] This study has been conducted to assess different locations of orofacial pain and its associations with age and gender among patients presented at Isra dental College, Hyderabad.

MATERIAL AND METHODS: This observational study took place at Isra Dental College, Hyderabad. Study duration was 6 months from august 2018 to January 2019. All the patients presented with age more than 12 years, orofacial pain and either of gender were included. All the patients less than 12 years of age, with any facial congenital abnormality and those who refused to participate in the study were excluded. Patients were interviewed regarding demographic information including duration and location of the pain. Pain severity was assessed by using visual analog scale 1-10 and categorized as mild, moderate and severe. All the data was recorded in self-made proforma. SPSS 20 was used for analysis of data. Frequency-percentage calculations were achieved in categorical variables; and in case of numerical variables, mean and standard deviation calculations were performed. Chi-square test was employed and p-values were deemed significant if these were <0.05.

RESULTS:

Total 710 cases were studied, most common age groups were 31-40 years with 26.3% cases, 41-50 years with 25.9% cases and 51-60 years with 24.2% cases, followed by 13-20 years old were 4.5%, 21-30 years old were 9.2%, while remaining 9.9% were within the age limit of >60 years. Females were 52.0% and males were 48.0%.**Table. 1.**According to the pain location teeth pain was most common in 78.6% patients, followed by inside mouth pain was in 12.1%, face pain in 8.6% patients and headache in 0.7%. According to the chronicity most of the patients 63.8% presented with acute pain and 36.2% had chronic pain.**Table. 2.**

There was insignificant difference in orofacial pain according to age and gender p-values were quite insignificant.**Table. 3.**

DISCUSSION

Or facial pain may significantly affect daily routines, social and personal tasks, and professional events. In our study, most common age groups were 31-40 years with 26.3% cases, 41-50 years with 25.9% cases and 51-60 years with 24.2% cases, followed by 13-20 years old were 4.5%, 21-30 years old were 9.2%, while remaining 9.9% were within the age limit of >60 years. Females were more than males i.e. 52.0% vs 48.0% respectively. In comparison to our results, a national study in the United States found that 12.2% of adults had experienced toothache in the preceding 6 months,[11] and also a Brazilian national study reported a toothache prevalence of 35.7% during last 6-months among individuals with age limits of 15 to 19 years, 34.8% among individuals aged 35 to 44 years, and 22% individuals aged 65 to 74 years.[12] Multiple

Table.1. Patient distribution according to age and gender n=710

Variables	Frequency	Percent
Age		
13-20	32	4.5
21-30	65	9.2
31-40	187	26.3
41-50	184	25.9
51-60	172	24.2
>60	70	9.9
Total	710	100.0
Gender		
Male	341	48.0
Female	369	52.0
Total	710	100.0

Table.2. Patient distribution according to severity and Chronicity of pain n=710

Variables	Frequency	Percent
Locations of pain		
Teeth	558	78.6
Inside the mouth	86	12.1
Face	61	08.6
Head	05	0.7
Total	710	100.0
Chronicity		
Acute	453	63.8
Chronic	257	36.2
Total	710	100.0

Table.3. Pain location according to age and gender n=710

Oral health status		Location of the pain				Total	P-value
		Teeth	Inside the mouth	Face	Head		
Gender	Male	275	36	28	2	341	0.593
	Female	283	50	33	3	369	
	Total	558	86	61	5	710	
Age	13-20	30	02	00	0	32	0.170
	21-30	54	09	02	0	65	
	31-40	145	22	19	1	187	
	41-50	139	24	20	1	184	
	51-60	135	16	19	2	172	
	>60	55	13	1	1	70	

factors (including socioeconomic status, age and gender) significantly contributed to the orofacial pain associated prevalence. Several findings have established an association between general pain or orofacial pain and gender or age. In the study conducted by Bagis B et al[13] females were more predisposed to orofacial pain symptoms than male counterparts, and certain symptoms related to orofacial pain decreased with increasing age. In study conducted by Maulina T et al,[14] out of 700 respondents, orofacial pain was reported by 55.9% individuals in last 6 months and out of these 55.9% cases of orofacial pain, 91.6% reported toothache, and 65.0% reported a discomfort that affected their routine activities. Jaw stiffness/ jaw ache were significantly associated among individuals getting education (p=0.001) and domestic area residents, when awaking in the morning (P-values 0.001 and 0.021 respectively); as well as night grinding/clenching were significantly associated with age and gender (P-values 0.007 and <0.001 respectively).

The term Orofacial pain implies to any pain, originating from mouth, face and the jaws. Different people experience pain differently even if the unpleasant stimulations are similar, and react as per different suffering intensities.[2] In our study, most of the patients (47.2%) had moderate pain, 29.3% had mild pain, while 23.5% had severe pain. According to the chronicity most of the patients (63.8%) presented with acute pain and 36.2% had chronic pain. In comparison to our results, in other studies, acute orofacial pain distribution among females was not based on locations, such as, joint or muscle. Studies remained inconsistent in deciding the difference in terms of psychosocial profile.[15,16] Moreover, the reported incidence of acute orofacial pain that involves high and chronic pain estimates possibly includes females with both central and peripheral sensitization.[17]

In present study, no significant variance was seen in orofacial pain according to age and gender; p-values were quite insignificant. However, Macfarlane et al, [18] recounted a significant association between gender and age in terms of orofacial pain; and similar results were stated by Gonçalves et al.[19]

CONCLUSION: It was concluded that most common pain location was tooth. Age and gender were insignificant according to orofacial pain locations. Orofacial pain especially tooth pain is the very sever unpleasant condition and dental facilities are unavailable in periphery basic Hospitals to solve this situation immediately.

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