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Original Research Article

Assessment of oral, dental and facial pain in patients

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ABSTRACT

Introduction: Discomfort or pain in mouth is a common problem. It needs to be fully catered to and treated at the earliest.
Aim and Objectives: To find out causes of oral pain in patients.
Material and Methods: 500 patients above 20 years were chosen.
Results: Patients have various reasons of oral pain, but they are careless.
Discussion: Patients suffer oral pain and some accept it as part of their living.
Conclusion: Oral pain should be thoroughly evaluated and taken care of in diagnosis.

1. Introduction

Pain in the oral cavity is a serious issue. The International Association for the study of pain defined it as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.[1]

Theories of pain perception:[2] are Specificity theory, Pattern theory, Gate control theory. It is exactly pain which is the most common reason for patients to come to the dental clinic; this pain usually originates in the tooth itself or its supporting structures.[3]

Orofacial pain is pain within the trigeminal system.[4] Patients will sometimes present to medical practitioners for the management of pain or other dental or oral problems.[5]

Aim is to inquire patients about dental pain (like conversation and basic tools) and to evaluate oral pain. Objective is to find out about oral pain in rural and urban populations. Clinical relevance is that patients experience oral pain but they do not give much attention to it.

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2. Materials and Methods

500 subjects above 20 years from village and half from city in 2 months visiting a dental hospital on outer of Malihabad were studied. Personal details were asked and recorded like in normal conversation and then results followed.

3. Results

3.1. Oral pain

Table 1: Descriptive analysis of oral pain in study population (N=500)

Oral pain	N	%
Dental pain	300	60%
Non dental pain	200	40%
Total	500	100%

In this study, it was seen that 60% had dental pain, 40% had non-dental pain. Dental pain comprised of 66.7% that had pulpal pain and 33.3% was of periapical abscess. Non-dental pain was 37.5% of tmd temporomandibular disorders, 15% of sinus, 10% of bruxism, 6% of neurogenic, 4% of

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Table 2: Descriptive analysis (N=500)

Oral pain		**N (%)**
Dental pain (N=300)	Pulpal pain (Dentinal pain, reversible pulpitis, irreversible pulpitis)	200 (66.7%)
	Periapical abscess	100 (33.3%)
Non dental pain (n=200)	TMD	75 (37.5%)
	Sinus	30 (15%)
	Bruxism	20 (10%)
	Neurogenic	12 (6%)
	Psychogenic	8 (4%)
	Angina referred	5 (2.5%)
	Periapical abscess	50 (25%)

Table 3: Descriptive analysis

Age in Years		**N (%)**
Till 45 Years (N=425)	Pulpal pain (Dentinal pain, reversible pulpitis, irreversible pulpitis)	200 (47.1%)
	Periapical abscess	100 (23.5%)
	TMD	75 (17.6%)
	Bruxism	20 (4.7%)
	Sinus	30 (7.1%)
	Neurogenic	12 (16%)
Above 45 Years (N=75)	Psychogenic	8 (10.7%)
	Angina referred	5 (6.7%)
	Periapical abscess	50 (66.7%)

Table 4: Descriptive analysis (N=500)

Gender		**N (%)**
Male (N=258)	Pulpal pain	94 (36.4%)
	Periapical abscess	52 (20.2%)
	TMD	42 (16.3%)
	Bruxism	11 (4.3%)
	Sinus	18 (7%)
	Neurogenic	7 (2.7%)
	Psychogenic	3 (1.2%)
	Angina referred	53 (20.5%)
	Periapical abscess	28 (10.9%)
Female (N=242)	Pulpal pain	116 (47.93%)
	Periapical abscess	48 (19.8%)
	TMD	33 (13.6%)
	Bruxism	9 (3.7%)
	Sinus	12 (5%)
	Neurogenic	5 (2.1%)
	Psychogenic	5 (2.1%)
	Angina referred	2 (0.8%)
	Periapical abscess	22 (9.09%)

psychogenic, 2.5% of angina referred, 25% of periapical abscess. Till 45 years, 47.1% had pulpal pain, 23.5% had periapical abscess, 17.6% had tmd temporomandibular diseases, 4.7% had bruxism, 7.1% had sinus. Above 45 years, 16% had neurogenic, 10.7% had psychogenic, 6.7% had angina referred and 66.7% had periapical abscess. In males, 36.4% had pulpal pain, 20.2% had periapical abscess, 16.3% had tmd temporomandibular disorders, 4.3% had bruxism, 7% had sinus, 2.7% had neurogenic, 1.2% had psychogenic, 20.5% had angina referred, 10.9% had periapical abscess. In females, 47.93% had pulpal pain, 19.8% had periapical abscess, 13.6% had tmd temporomandibular disorders, 3.7% had bruxism, 5% had sinus, 2.1% had neurogenic, 2.1% had psychogenic, 0.8% had angina referred and 9.09% had periapical abscess.

4. Discussion

Orofacial pain interferes with daily life activities impacting negatively on quality of life.[6] When a patient visits our clinic complaining of dental pain, we diagnose the cause by looking- both visually and radiographically-for organic or functional abnormalities. Nearly all pain is caused by an organic problem such as dental caries, periodontitis, pulpitis or trauma.[7] Dental pain occurs as a result of inflammation of the pulp(pulpitis). This is generally caused by bacteria from decayed teeth or defective dental fillings.[8] Peoples' perceptions of their oral health status and the related impacts of dental pain on their daily lives are important in planning services designed to improve the quality of life of individuals(9).

The orofacial pain classification as outlined by Okeson[9,10] is divided into physical (Axis 1) and psychological (Axis 2) conditions. Physical conditions comprise temporomandibular disorders (TMD), which include disorders of the temporomandibular joint (TMJ) and disorders of the musculoskeletal structures (eg masticatory muscles and cervical spine); neuropathic pains, which include episodic (eg. Trigeminal neuralgia TN) and continuous (eg. Peripheral/centralized mediated) pains and neurovascular disorders (eg. migraine). Psychological conditions include mood and anxiety disorders. Research to date has shown that pain influences most dimensions of quality of life, mainly the physical and emotional ones. QOL is defined as the person's evaluation of his or her well-being and functioning in different life domains.[11]

Questions to ask when assessing oral pain:[12]

When obtaining a pain history, the mnemonic SOCRATES can be useful

1. Site- where is the pain?
2. Onset- when did it start?
3. Character- can you describe the pain?
4. Radiation- does the pain spread anywhere?

5. Associations- are there other problems associated with the pain?
6. Time course- does the pain follow any pattern? How long does it last?
7. Exacerbating or relieving factors- does anything worsen or improve it?
8. Severity- how bad is the pain?

4.1. Assessment of pain[13]

Rating scale techniques are often used. The most commonly used techniques are:

Numerical rating scale, visual analogue scale, McGill pain questionnaire, behavioral rating scale.

The orofacial pain from dental origin was specifically called ‘ odontogenic toothache’.[14] Orofacial pain is tenderness in the head, face (including oral cavity) and neck.[15] Pain in the face and mouth is a frequent problem.[16] Facial or orofacial pain refers to any type of pain in the area bounded by the eyes and the lower mandibles, including the oral cavity.[17]

For Patients affected by tmds- Abdelnabi et al showed that new dentures with corrected occlusion significantly improved clinical signs and symptoms of tmd in complete denture wearers and disc position.[18] Prosthodontic treatment in patients affected by bruxism- various treatments have been suggested based on behaviour modification, such as habit awareness, habit reversal therapy, and relaxation techniques, which may eliminate awake bruxism.[19] The prosthodontist has always played a major role in tmd treatment by providing many different treatments mostly oriented toward prosthetic reconstruction.[20] The instability of the bite and the severity of the clinical presentation need to be considered as possible contraindications for any restorative procedure.[21] Furthermore, we should notice the importance of stable occlusion in the intercuspal position.[22] Management of Orofacial pain can only be effective if the correct diagnosis is reached and may involve referral to secondary or tertiary care.[23] Dental pain is extremely common and it can also coexist with other conditions.[24] Newer disciplines such as oral diagnosis/oral medicine, dental anesthesiology and temporomandibular disorders TMD/Orofacial pain are focused on the diagnosis and treatment of diseases affecting the entire head and neck.[25] The relationship between tmds and bruxism is controversial.[26] OFP is highly prevalent in the population28. Facial pain has a considerable impact on Qol. Different Orofacial pains may cause variable levels of anxiety and depression and various coping strategies, daily limitations or perception of the disease.[27] Moreover recurrent headache has been identified as a neurological disorder also of high prevalence in the general population.[28] Wearing complete dentures does not predispose edentulous individuals to tmds.[27]

Management of chronic pain conditions isamong the most difficult problems confronting clinicians. These conditions often found in the area of the head and neck, account for approximately 40% of all cases seen in major pain clinics.

5. Conclusion

Pain in any kind is unbearable. When it is oral pain, it is a worse scenario. This condition has to be diagnosed and treated at the earliest. Proper knowledge and clinical skills have to be used in patients. In dental treatment, our goal is to cure the patient of pain. In prosthodontics again same goal of pain including Orofacial aspects of pain also. It has to be first diagnosed and examined carefully. Pain is checked if it is of dental or non dental origin. Then the suitable treatment planning is done. It is important that the patient is also informed and motivated for the treatment. Patients also need encouragement and counselling from dentists and prosthodontists. Depending upon the cause, the Orofacial pain is treated. It requires utmost patience and perseverance from the dentist and prosthodontist as it is time consuming sometime. Nevertheless it is challenging but definitely rewarding.

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7. Conflict of Interest

None declared.

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