

CHRONIC vs ACUTE Temporomandibular disorder pain – A cross sectional study

Dr. Annie Susan Thomas¹, Ariel Hannah Philip², Dr. Philip Oommen³

¹(Professor, Department of Prosthodontics, Pushpagiri College of Dental Sciences, Thiruvalla, Kerala, India)

²(3rd year BDS student, CDC Ludhiana, Punjab, India)

³(Medical Officer, General Hospital, Kottayam, Kerala, India)

Abstract:

Aim: To investigate the prevalence of chronic and acute pain Temporomandibular disorder (TMD) patients reporting to a TMD clinic.

Materials and Methods: In this cross sectional study, the sample consisted of 563 patients, both males and females of 18-45 years. Diagnosis of TMD was based on Research Diagnostic Criteria for TMD (RDC – TMD) Axis 1. The patients having acute and chronic TMD pain were categorised using questionnaires.

Results: Of the total sample size selected 74.4% had chronic TMD pain and 25.6% of patients had acute TMD pain.

Conclusion: A high prevalence (74.4%) of TMD patients with chronic pain was found in the present study. Early intervention of TMD pain patients at an acute state is essential to prevent its conversion to an intractable chronic musculoskeletal condition.

Key words: Temporomandibular Disorder (TMD), acute pain, chronic pain, bio-medical model, bio-psychosocial model.

Date of Submission: 18-01-2022

Date of Acceptance: 02-02-2022

I. Introduction

Temporomandibular Disorders (TMD) are a group of joint and muscular disorders of the orofacial region. This is manifested as Temporomandibular Joint (TMJ) pain, muscular pain, restricted mouth opening and sounds associated with joint function^[1,2]. Up to 75% of the general population has at least one sign of TMD, signifying a major public health disorder. More than 30% has one symptom of TMD and 5-10% of general population has TMD pain. These patients usually require professional help.

When the pain persists beyond 3-6 months, it is considered a chronic pain disorder^[2,3]. TMD is the most common non-odontogenic chronic pain condition in the orofacial region challenging the dentists and other health care professionals. The chronic pain management itself is the most perplexing problem confronting the clinicians.

As the pain duration increases, the patient becomes more unresponsive to treatment modalities^[4]. So it is always better to treat the pain at an earlier stage, then the treatment becomes more effective and economical. The early treatment approaches to TMD pain include physical therapy, pharmacotherapeutic techniques, intraoral appliances, etc. Later stages of TMD treatment may require permanent occlusal alterations and TMJ surgery.

II. Aim Of The Study

To determine the prevalence of chronic and acute pain in patients reporting to the TMD clinic.

III. Materials And Methods

A cross sectional study was conducted in both male and female patients who reported to the TMD clinic. A total of 563 patients were randomly selected of which 212 were males and 351 were females of the 18-45 year age group. They were selected based on the RDC – TMD Axis 1 Criteria. The patients who were having acute and chronic pain were categorised by questionnaire. The patients who were having more than 3 months of TMD pain were categorised as chronic pain patients and less than 3 months as acute pain patients.

IV. Results

Of the 563 patients, 419 patients were found to be having chronic TMD pain. Of the total sample size selected, 74.4% had chronic TMD pain and 25.6% of patients had acute TMD pain.

V. Discussion

Many studies have pointed out that when the TMD pain becomes chronic, it has associated behavioural, psychological and psychosocial factors as in chronic pain due to other causes. So, chronic pain patients need both bio-medical and bio-psychosocial assessment and management^[5,6]. The bio-medical model assesses and treats the pain disorder affecting TMJs and masticatory muscles using pharmacological and other supportive therapies. The bio-psychosocial model is concerned with psychosocial dysfunction such as depression, anxiety, etc^[7-10]. The treatment of chronic pain is more complicated and takes more time to resolve compared to acute pain. Acute pain not only resolves faster but is also cost effective. The present study throws light into the fact that the patients usually seek treatment when the TMD pain becomes chronic (74.4%), which is the majority.

VI. Conclusion

Early intervention of TMD pain patients at an acute stage can prevent the disease being converted into an intractable chronic musculoskeletal disorder. The proper communication between primary health care providers and pain specialists should be encouraged to identify TMD at the acute stage for maintaining a healthy stomatognathic system.

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Acknowledgement

The authors acknowledge the valuable contribution of Mr. Jacob Oommen Philip, Mr. Jedidiah Israel and Ms. Sarah Ann with providing assistance and technical editing.

Dr. Annie Susan Thomas, et. al. "CHRONIC vs ACUTE Temporomandibular disorder pain – A cross sectional study". *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 21(02), 2022, pp. 06-07.