

NTI-tss as a Therapy for Temporomandibular Joint Disorder (A Case Report)

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INTRODUCTION

TMD are disorders related to the masticatory system, which are considered the main musculoskeletal cause of orofacial pain. A large proportion of the global population is affected by TMD, with an estimated 25% of adults presenting signs and/or symptoms. The most common TMD diagnosis are from masticatory muscle disorder, and myofascial pain is the most common symptom.

CASE REPORT

23-year-old female came to Universitas Airlangga Dental Hospital with a chief complain of clicking sound and pain in the last 2 years. Pain was felt when eating and localized around the ear. Pain has been getting worse since 20 days ago. Patient was assessed with DC/TMD. The pain comes and goes, stiff when opening the mouth and pain when chewing hard food. Opening pattern is uncorrected to the left. Click TMJ noises during open, close, and eccentric movement. Pain on Masseter and lateral pole TMJ on the right side. According to the decision tree, the diagnoses are myalgia and disc displacement with reduction.

CASE MANAGEMENT

Prescribed with muscle relaxant and N-position exercise, but there is no improvement. So, the patient is treated with NTI-tss device for 3 weeks and the symptom and pain are reduced. Pain free opening raised from 30 mm to 40 mm. Maximum unassisted opening from 44 mm to 46 mm. Maximum assisted opening from 48 mm to 49 mm. Lateral movement to the right from 8 mm to 9 mm, to the left from 6.5 mm to 10 mm. Protrusion from 6 mm to 10 mm.



Pain free opening



Lateral movement to the right and left



Protrusion



Using NTI-tss device

CONCLUSION

NTI-tss device is a treatment option for TMD patients with myofascial pain of the masticatory muscles. This could be attributed to an increase activation of periodontal mechanoreceptors surrounding incisor teeth that show a much higher sensitivity at low force levels compared to posterior teeth.

Keyword: TMD, DC-TMD, NTI-tss, Myofascial pain