



# The Management of TMD, MPD With Internal Derangement- A Case Report

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#### **Abstract**

The management of temporomandibular disorders (TMD) associated with the purpose of the present case report is to review the etiological factors and bilateral anterior disc displacement with reduction, abnormal masticatory and cervical muscles activity, Bruxism habit and malocclusion. Patient was successfully free of pain symptoms with jaw reposition occlusal splint, night Farrar splint, medication, physical therapy, trigger point injection and at the end for orthodontic treatment.

## **Chief Complain**

A 35-year female patient presented to the Orofacial and Temporomandibular disorder (TMD) pain management clinic referred from general dentist. Her complain more pain left side than right of the jaw extended to preauricular area, earache some time with pressure, headache worse in the morning, joint sound more left side than right (clicking), grinding teeth while sleeping, poorly sleep, tired while eating, neck and shoulder muscle tight and painful [1,2]. The problem began 7 year ago and the symptoms increasing gradually, patient had orthodontic treatment at age of 14.

#### **Medical History**

Nothing abnormal detected.

## **Extra Oral and Intraoral Examination**

Restriction of mouth opening the patient opened 25mm with a slight deviation to the right side. Clicking in in both temporomandibular joint (TMJ). The lateral and forward movement jaw restricted and painful [3,4]. The masticatory and cervical muscles very tender and painful to palpation. The dentation was class I right side and class II left side with notice of wear upper and lower teeth. Deep bite 3mm.

## **Radiographic Examination**

Panoramic (OPG) showed slightly condyle degeneration both sides. Magnetic resonance imaging (MRI) showed anterior disc displacement with open and closed movement left and right TMI.

## **Diagnosis**

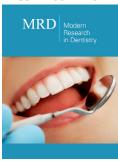
Myofascial pain and dysfunction (MPD). Temporomandibular disorder (TMD) with internal derangement with reduction right and left side of TMJ. Bruxism possible related to stress. Jaw shifted to left side.

### **Treatment Plan**

**Phase I:** Occlusal splint for upper and lower jaw, Physical therapy, Medication and Trigger point injection.

**Phase II:** Orthodontic treatment after the patient free of symptoms to correct the occlusion and up righting post teeth to increase vertical dimension.





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Submission: 
☐ October 08, 2020

Published: ☐ October 30, 2020

Volume 5 - Issue 4

How to cite this article: Alammar AM. The Management of TMD, MPD With Internal Derangement- A Case Report. Mod Res Dent. 5(4). MRD. 000619. 2020. DOI: 10.31031/MRD.2020.05.000619

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MRD.000619. 5(4).2020 531

## **Treatment**

Lower reposition appliance (LOA) to keep the mandible anteriorly positioned (none click position) the patient well wore the appliance during the day only. Upper Farrar appliance with anterior vamp for the sleeping time. Trigger point injected at temporalis, masseteric and trapezius muscle right and left sides. Medication prescribed Chlorzoxazone 250mg & Paracetamol 300mg two capsule three time a day for two weeks. Patient given physical therapy instruction and exercise to practice twice per day.

## **Prognosis**

The patient symptoms improved gradually she is free of pain after eight weeks, she advised to continue the upper and lower appliances. The appliances was adjust every three weeks for six months, her TMJ still clicking but free of tender and pain [5,6]. Then patient referred to orthodontic treatment to start phase II treatment.

## Conclusion

Temporomandibular disorder (TMD), Myofascial pain and dysfunction (MPD), internal derangement and bruxism remains

a difficult condition to manage. However, while the bruxism was controlled the symptom of pain, fatigue, tender, earache been resolved and sleeping improved. Clicking still there without pain but it possible to disappear after correcting the deep bite and the occlusions by orthodontic treatment.

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