## Customized Pain Management for Oral Appliance Associated Side Effects in Orofacial Pain Population during COVID-19 Pandemic: A Case Series.

# Authors: <u>Lu C.</u><sup>1</sup>, Alswaiti O.<sup>2</sup>, Lagreca G.<sup>3</sup>

Affiliations: <sup>1,2</sup> Craniofacial Pain Center, Department of Diagnostic Sciences, School of Dental Medicine, Tufts University; <sup>3</sup> Department of Prosthodontics, School of Dental Medicine, Tufts University

## Aim of investigation:

Access to pain care during this pandemic in MA has been significantly impacted since the declaration of emergency with the limitation of in-person visits. The aim of this report is to present the importance of clinical in-person appointments and customized management plans for three orofacial pain cases referred to our center with complaints of "bite changes", jaw pain, and headache.

## Methods:

Detailed clinical examinations of three orofacial pain cases confirmed myofascial TMD, newly developed malocclusion and headache attributed to TMD. However, the different precipitating factors include long-term use of partial coverage appliance without in-person follow ups, self-administered oral splint without clinical supervision, and inadequate clinical oversight after insertion of a dental sleep appliance with worsening obstructive sleep apnea respectively.

### **Results:**

After comprehensive in-person evaluations and collaboration with co-treating providers, we have identified the early onset of secondary malocclusions with additional pain complaints due to oral appliance fitting concerns with no adequate and cautious clinical follow ups, the immediate discontinuation of the preexisting appliances was suggested. Changing the partially covered appliance to stabilization design, refabricating a customized appliance with clinical supervision and alternative positional therapy with confirmation of sleep study respectively provide significant improvement of malocclusion and pain complaints.

### **Conclusions:**

Although the utilization of virtual platforms during this pandemic may help to improve access to care, the limitations of telehealth in orofacial pain, such as early identification of secondary malocclusion, remain to be cautiously evaluated and addressed. Further research is critically needed for the implementation of telehealth as an adjunct clinical option.

### Acknowledgements: None