Physical Therapy Intervention for a Patient with Temporomandibular Joint Dysfunction Caused by Two Traumatic Events: A Case Study

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**Background**
- Temporomandibular disorders (TMD) are a collection of pathoanatomical dysfunctions of the temporomandibular joint (TMJ).
- Associated with a variety of symptoms throughout the head and neck.
- Severe lack of supportive evidence for PT management used in the conservative and/or post-surgical treatment of TMD.
- The dental profession provides much of the current literature on TMD but is limited in conservative and surgical interventions.
- Research has showed arthrocentesis to be a beneficial procedure to perform initially.
- Long-term outcomes for pain and functional impairments were comparable with conservative treatment.

**Purpose**
- Purpose is to provide information regarding conservative and post-surgical physical therapy treatment of TMD due to a traumatic mechanism of injury.
- Rationale for this case report was to describe a physical therapy plan of care for TMD.

**Case Description**
- 32 year old female education technician for adolescents with mental and behavioral problems.
- Physically assaulted twice at work.
- Referred to PT after 2nd event.
- Unable to speak or eat because of pain, locking, and limited ROM of mandible.
- Liquid diet weeks 1-3, soft foods diet weeks 4-7, and limited normal diet weeks 7-8.
- Severe locking incident prompting MRI during week 3.
- MRI finding were left TMJ disk dislocation and left TMJ lagging behind right during depression and elevation.
- Appointment with oral surgeon week 4.
- Underwent arthrocentesis for left TMJ during week 4 and arthrocentesis for right during week 6.

**Interventions**
- **Postural awareness**
- **Pain management techniques**
- **Soft tissue mobilization**
- **Self-massage techniques**

**Outcome**
- Continuous gains in mandibular ROM.
- Patient’s goals were met regarding pain, ROM, speaking, and eating.
- Patient returned to work with limited restriction.
- Returned to normal diet at discharge.
- Pain and locking decreased significantly.

**Figures**
- Figure 1: Sequence of events throughout the patient’s plan of care.
- Figure 2: Procedural interventions categories and prescribed interventions in the PT plan of care.
- Figure 3: Mandibular Range of Motion Observation.

**References**

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