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| **Name:** |
| Madison Nelson |
| **Group:** |
| 10-B |
| **Pathology Question:** |
| What is the etioligy of temporomandibular joint disorder? |
| **Report:** |
| It is unclear what the sole causes of temporomandibular disorder (TMD) are, but symptoms are more commonly found in women between the ages of 20 and 40 years old. Initially, TMD was believed to be caused heavily by malocclusion, but it is now believed to be a multifactorial disorder which can be caused by structural misalignment between the mandible and the cranium, laxity of the joint, rheumatic or musculoskeletal disorders, an unhealthy lifestyle, trauma, and/or parafunctional habits. Trauma to the temporomandibular joint may include acute trauma to the jaw or trauma from hyperextension, such as, during dental or oral procedures, intubation, or yawning. Parafunctional habits may include bruxing, clenching, and lip or cheek biting. A lot of these parafuncitonal habits may be enhanced by emotional distress.  Class III malaocclusion is often corrected with a protraction face mask (PFM) and it has been suggested that risks of this therapy may contribute to clinical signs of TMD. PFM’s may cause posterior displacement of the condyle which may compress the nerve and vessel mesh in the bilaminar zone and they may also contribute to anterior displacement of the articular disc. PFM’s also may redirect the mandibular downwards and backwards growth. As a result, skeletal changes may occur leading to a posterior displacement of the condyle. While these were suggested possibilities of PFM aggravating or inducing TMD, a systematic review found that PFM was not a risk factor for the development of TMD. |
| **References:** |
| Jung, H., Kim, S.Y., Park, H. *et al.* Orthognathic surgery and temporomandibular joint symptoms.*Maxillofac Plast Reconstr Surg* **37,**14 (2015). https://doi.org/10.1186/s40902-015-0014-4  Huang, X., Cen, X., & Liu, J. (2018). Effect of protraction facemask on the temporomandibular joint: a systematic review. *BMC oral health*, *18*(1), 38. https://doi.org/10.1186/s12903-018-0503-9 |