

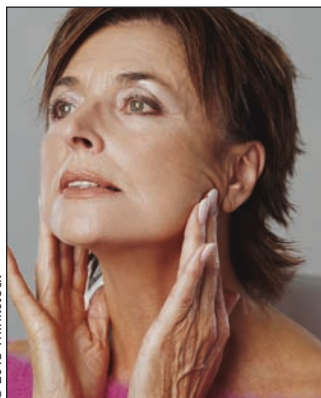
FIVE THINGS TO KNOW ABOUT ...

Temporomandibular disorders

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Temporomandibular disorder is regarded as a complex medical disorder, often with a multifactorial cause

Temporomandibular disorder (TMD) is a diagnostic term describing a wide variety of disorders associated with the temporomandibular joint complex (bone, muscles, cartilage, and / or ligaments), with a high prevalence rate (up to 40%–75%) in a general population of having at least 1 sign of the disorder.¹ Based on evidence from multiple epidemiologic and experimental studies, as well as clinical trials, the diagnosis and treatment of TMD may be most appropriately conceptualized within the biopsychosocial medical model of disease.²



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Otologic symptoms are common indicators of temporomandibular disorder

Based on a prospective clinical study, otologic complaints such as otalgia, tinnitus, vertigo and muffling have reportedly higher prevalence in patients with TMD than in controls.³

Centrally and peripherally acting disorders can significantly affect prognosis

As seen in multiple clinical epidemiologic studies, both centrally acting conditions, such as fibromyalgia and anxiety or depression, and peripherally acting conditions, such as trauma and postural tension, have been associated with delayed or incomplete recovery despite conventional treatments.⁶ Such conditions are also associated with increased risk of progression of temporomandibular disorders from acute to chronic status.⁶

Clicking of the temporomandibular joint that is otherwise asymptomatic often does not require active treatment

Clicking of the temporomandibular joint (a common finding in a general population) is usually attributed to an articular disc disorder within the temporomandibular joint complex.⁴ A longitudinal study involving patients with an asymptomatic click failed to show a significant risk for long-term complications.⁴

Most cases are not substantially influenced by dental occlusion

Although this finding is controversial, multiple systematic reviews, epidemiologic and case-control studies have shown that the influence of occlusion as a cause of temporomandibular disorder is low.⁵

References

1. Scrivani SJ, Keith DA, Kaban LB. Temporomandibular disorders. *N Engl J Med* 2008;359:2693-705.
2. Suvinen TI, Reade PC, Kempainen P, et al. Review of aetiological concepts of temporomandibular pain disorders: towards a biopsychosocial model for integration of physical disorder factors with psychological and psychosocial illness impact factors. *Eur J Pain* 2005;9:613-33.
3. Hilgenberg PB, Saldanha AD, Cunha CO, et al. Temporomandibular disorders, otologic symptoms and depression levels in tinnitus patients. *J Oral Rehabil* 2012;39:239-44.
4. Magnusson T, Egermark I, Carlsson GE. A longitudinal epidemiologic study of signs and symptoms of temporomandibular disorders from 15 to 35 years of age. *J Orofac Pain* 2000;14:310-9.
5. Türp JC, Schindler H. The dental occlusion as a suspected cause for TMDs: epidemiological and etiological considerations. *J Oral Rehabil* 2012; 39:502-12.
6. Velly AM, Friction J. The impact of comorbid conditions on treatment of temporomandibular disorders. *J Am Dent Assoc* 2011;142:170-2.

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