

IN-PERSON EXAMINATIONS

An in-person examination of the patient by a dentist or orthodontist is essential prior to beginning orthodontic treatment.



For some companies offering orthodontic treatment “direct-to-consumer,” or through clear aligners mailed directly to the patient, the patient is never examined in-person by the supervising dentist or orthodontist. An in-person examination provides crucial information for the safety and success of the patient’s treatment and includes essential components that simply cannot be replicated by reviewing only digital scans or other photographs.



In order to best protect patients, laws should require an in-person exam before orthodontic treatment begins.



Moving teeth is a complex biological process.

Teeth are moved by the pressure exerted by an orthodontic appliance, like clear aligners or braces.¹ This pressure causes necrosis (death) of the vascular tissue around the tooth, allowing the tooth to move within its alveolus (bone socket); and bone then reforms around the tooth.^{2,3}



Moving teeth is not just a cosmetic procedure.

The pressure from clear aligners or other orthodontic appliances causes “minor reversible injury” to the tooth-supporting structures.⁴ Moving teeth must take into consideration not just the final appearance of the teeth, but also impact on tooth and jaw function.⁵



The complexity of the process of moving teeth **requires that a trained expert (dentist or orthodontist) have all necessary information** at their disposal (which can only be gained through an in-person examination) before starting treatment.

Moving teeth has a profound effect on alignment of the bite, and oral functions like chewing, speaking, and movement of the jaw.

Even “just” moving the front teeth (the teeth visible when smiling) can have serious consequences. In one study that reviewed over 5,000 clear aligner cases, clinicians “frequently” reported the unintended consequence of a “posterior open bite,” where the back teeth do not come together.⁶

Posterior open bite has been described as “one of the most severe malocclusions that can impair a patient’s masticatory [chewing] function.”⁷

Improperly monitored movement of teeth can also lead to temporomandibular disorder (TMD) (a disorder of the jawbone joint).⁸

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[1] Wise, G.E. and King, G.J. (2008) Mechanisms of tooth eruption and orthodontic tooth movement. *J Dent Res*, 87, 414-434 at 414.

[2] Wise & King (2008) at 415.

[3] Antoun, J.S., Mei, L., Gibbs, K. and Farella, M. (2017) Effect of orthodontic treatment on the periodontal tissues. *Periodontol* 2000 74, 140-157 at 141.

[4] Wise & King (2008) at 414.

[5] Gkantidis, N., Christou, P. and Topouzelis, N. (2010) The orthodontic-periodontic interrelationship in integrated treatment challenges: a systematic review. *J Oral Rehabil*, 37, 377-390 at 377.

[6] Hodge, M. (2015) A clinician’s guide to reducing the occurrence of posterior open bite following clear aligner therapy. *J Am Acad of Cosmet Orth*, Winter 2015, 6-24 at 6.

IN-PERSON EXAMINATIONS

An in-person examination prior to beginning orthodontic treatment is far more thorough than the remote review of a digital scan and patient records.



Scientific-credible authorities are clear in their disagreement with companies who claim that an in-person examination is not required for safe and effective orthodontic treatment:

“The orthodontist’s clinical examination of the patient is an **irreplaceable cornerstone of orthodontic treatment**. Thus, reliability of the visual information that is communicated through teledentistry still remains to be resolved to maintain comparable with the quality of onsite orthodontic visits.”¹⁵

“The importance of **direct patient supervision** and routine follow-ups during orthodontic therapy **cannot be overlooked**.”¹⁶

“It is important to keep in mind that even the best photographs or videos are **never a substitute for careful clinical evaluation**—they are just a record of what was observed clinically, or what should have been observed and recorded....”¹⁷

“Orthodontists are the essence of orthodontic treatment, not aligners.”¹⁸

When orthodontic treatment is done through asynchronous teledentistry (meaning the dentist or orthodontist never has live interaction with the patient, and never sees the patient in-person), the practitioner must rely on only a digital scan and a review of records.

An in-person examination provides **far more information** than a digital scan alone:

Periodontal probing (probing of the gums) can only be done in person.

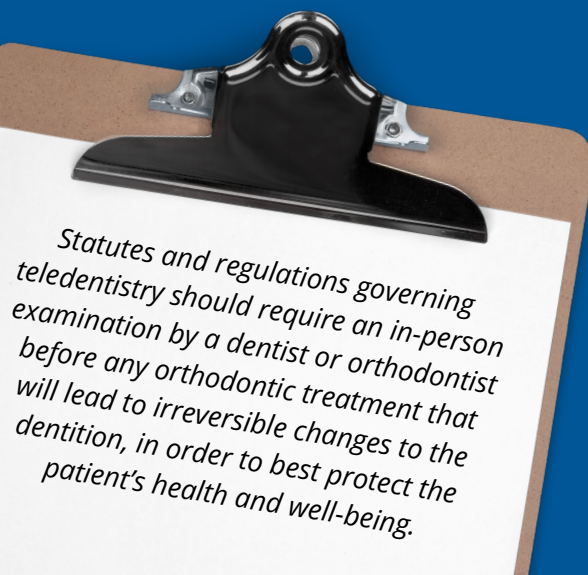
- Periodontal probing (which has been called “mandatory” before orthodontic treatment) is by far the most effective—if not only—way to properly evaluate gum health.⁹ Periodontal probing can only be done in person.
- If teeth are moved when the patient has aggressive periodontitis (gum disease), tooth loss can occur.¹⁰
- If teeth are moved when the patient has untreated periodontitis, recession (exposure of the tooth roots) can occur, leading to aesthetic concerns, tooth hypersensitivity, and can lead to decay of the root.¹¹
- Adults—who comprise a substantial percentage of direct-to-consumer orthodontic patients—are also more likely to have periodontal problems, and thus face potential tooth loss or root resorption.¹²

Without seeing the patient in-person, the supervising practitioner cannot:

- Observe the function or clicking in a patient’s opening and closing of their jaw;
- Physically determine the tactile feel of the patient’s gum tissue; or
- Assess the patient’s body language and potential for noncompliance during treatment.¹³

Without seeing the supervising practitioner in person, the patient has no opportunity to ask questions directly to the practitioner.

- Legal and ethical experts throughout the medical and dental fields agree that without a chance to ask the practitioner questions about his or her treatment, it is doubtful whether the patient can give informed consent to the treatment.¹⁴



[7] Huang, W., Shan, B., Ang, B., Ko, J., Bloomstein, R., and Cangialosi, T., (2020) Review of etiology of posterior open bite: is there a possible genetic cause? Clin Cosmet Investig Dent, 12, 233-40 at 233.

[8] Okeson, J.P. (2015) Evolution of occlusion and temporomandibular disorder in orthodontics: Past, present, and future. Am J Orthod Dentofacial Orthop, 147, S216-223 at 218.

[9] Gyawali, R. and Bhattarai, B. (2017) Orthodontic Management in Aggressive Periodontitis. Int Sch Res Notices, 2017, 8098154 at 2.

[10] Carvalho, C.V., Saraiva, L., Bauer, F.P.F., Kimura, R.Y., Souto, M.L.S., Bernardo, C.C., Pannuti, C.M., Romito, G.A. and Pustigliani, F.E. (2018) Orthodontic treatment in patients with aggressive periodontitis. Am J Orthod Dentofacial Orthop, 153, 550-557 at 550.

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[12] Gkantidis et al. (2010) at 377.

[13] American Association of Orthodontists, Clinical practice guidelines for orthodontics and dentofacial orthopedics (Rev. 2021), accessible at https://www2.aaoinfo.org/wp-content/uploads/2021/05/Clinical-Practice-Guidelines_Approved-2021-HOD.pdf, at 7.

[14] Proffit, W.R., Fields, H.W., Larson, B.E., and Saver, D.M. CONTEMPORARY ORTHODONTICS, 6TH ED. (Elsevier) at 208-09 and 229.

[15] Ibid.

[16] Squires, T., Michelogiannakis, D., Rossouw, P.E. and Javed, F. (2020) An evidence-based review of the scope and potential ethical concerns of teleorthodontics. J Dent Educ, 85, 92-100 at 92.

[17] Proffit et al., CONTEMPORARY ORTHODONTICS at 171.

[18] Park, J.H. (2020) A licensed orthodontist versus do-it-yourself orthodontics. Am J Orthod Dentofacial Orthop, 157, 591-592 at 591.