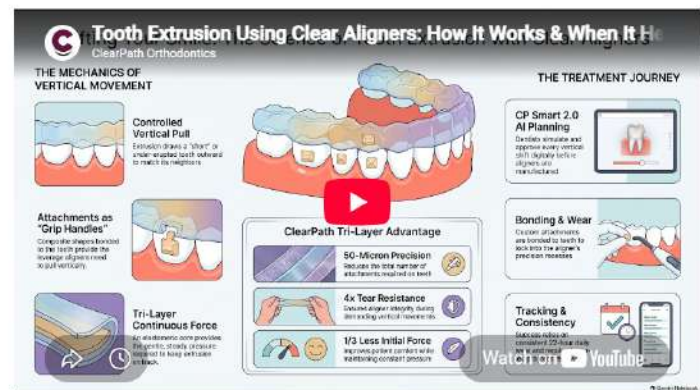


Precise Tooth Extrusion with Doctor-Led Clear Aligners

Podcast on this blog is available now! →



Tooth Extrusion Using Clear Aligners: How It Works & When It Helps

Tooth extrusion using clear aligners is one of the most searched questions in modern orthodontics. Patients want to know if a short or sunken tooth can be brought level without metal braces. Dentists want to know if aligner systems can deliver this movement predictably. The short answer is yes. With the right attachments, precise treatment planning and advanced aligner materials, clear aligners can guide a tooth vertically into its correct position. This guide explains how extrusion works, why it is considered a demanding movement and how ClearPath Aligners support it through Tri-Layer Technology and doctor-led planning.

[Read More: Why Dentists Are Switching to Clear Aligners](#)

What Is Tooth Extrusion in Orthodontics?

Tooth extrusion is the controlled vertical movement of a tooth out of the jawbone and towards the biting surface. In simple terms, it brings a tooth that sits too low or too high in the gumline into level with its neighbours. Extrusion orthodontics is a routine part of many treatment plans because even one under-erupted tooth can disturb the smile line and the bite.

Extrusion is the opposite of intrusion. Intrusion pushes a tooth deeper into the bone while extrusion draws it outward. Both are vertical movements and both need careful force control from the appliance.

Your dentist may recommend tooth extrusion for several reasons:

- A tooth that never fully erupted and sits shorter than the teeth beside it
- An uneven smile line where one or two teeth appear sunken
- Open bite correction where front teeth do not meet when the jaw closes
- Restorative needs identified by a dentist before a crown or veneer

In every case a [certified dentist](#) or orthodontist decides whether extrusion is needed and how far the tooth should move.

[Read More: What to Expect in Your First Week with Clear Aligners](#)

Can Clear Aligners Extrude Teeth?

Yes. Clear aligners can extrude teeth when the case is planned correctly and attachments are used. Extrusion is one of the more demanding movements in clear aligner treatment. Modern attachment design and digital planning have made it far more achievable than it was in the early years of aligner therapy.

How Clear Aligners Move Teeth

How ClearPath Aligners Move Teeth

Clear aligners tooth movement works through gentle sustained pressure. Each aligner in the series is shaped slightly differently from the position of your teeth today. When you wear it the plastic presses on specific surfaces and the tooth responds. Bone remodels around the root and the tooth shifts a fraction of a millimetre. The next aligner continues the movement. Over the full series this adds up to complete teeth straightening.

Why Extrusion Is Harder Than Other Movements

An aligner grips the crown of the tooth. Tipping and rotating a crown is straightforward because the plastic can push against it. Pulling a tooth vertically is different. Smooth enamel gives the aligner very little to hold. Without a grip point the aligner tends to slide over the tooth instead of drawing it outward. This is why extrusion depends so heavily on clear aligner attachments and on a material that delivers continuous force rather than a short burst.

The Role of Clear Aligner Attachments in Extrusion

Clear aligner attachments are small tooth-coloured composite shapes that your dentist bonds to specific teeth. For extrusion they act as handles. Here is how they work step by step:

1. Your dentist bonds a precisely shaped attachment to the tooth that needs to move
2. The aligner is manufactured with a matching recess that locks onto the attachment
3. As you wear the aligner it grips the attachment and applies a gentle vertical force
4. Each new aligner in the series continues the pull until the tooth typically reaches its planned position

Attachment Types and Placement

Attachment design matters as much as attachment presence. ClearPath gives clinicians a full menu of customisable clinical features. These include standard engagers, extended-beveled engagers, anterior and posterior bite ramps, cutouts for elastics, pontics, guides and bars. This range lets dentists manage cases from simple to complex and choose the exact configuration an extrusion case needs.

Precision manufacturing also reduces how much hardware a case requires. ClearPath aligners are produced with 50 microns precision. This advanced manufacturing standard reduces attachment requirements so patients typically need fewer bonded shapes on their teeth.

[Read More: How Clear Aligners Improve Oral Health—Not Just Your Smile](#)

How ClearPath Tri-Layer Technology Supports Extrusion

Tooth extrusion requires controlled and consistent force throughout treatment. **ClearPath Tri-Layer Technology** uses a precisely engineered **30:40:30 PCTG-TPU-PCTG structure**, with PCTG forming the outer and inner layers and TPU as the middle performance layer. This combination is designed to balance flexibility, durability, clarity and controlled force delivery, supporting accurate aligner fit and tooth movement throughout each stage.

Treatment Planning with CP Smart 2.0

ClearPath combines Tri-Layer Technology with CP Smart 2.0 digital treatment planning to help clinicians visualize and plan tooth movement before treatment begins. For extrusion cases, the dentist can evaluate the required vertical movement, staging and attachment needs, then review and approve the treatment plan before fabrication. This doctor-led approach helps keep treatment precise, predictable and tailored to each patient's needs.

What Patients Can Expect During Extrusion Treatment

If your dentist recommends tooth extrusion with clear aligners your journey typically follows these steps:

1. Consultation with a certified dentist who examines your teeth and confirms you are a candidate
2. A digital scan or impression that captures your teeth in fine detail
3. A personalised treatment plan created and simulated in CP Smart 2.0
4. Attachment bonding on the teeth that need extra grip
5. Aligner wear with a new aligner at intervals your dentist sets
6. Regular reviews so your dentist can confirm the tooth is tracking as planned

Tips for Keeping Extrusion on Track

Extrusion rewards consistency. These habits help your treatment stay on schedule:

- Wear your aligners for the hours your dentist prescribes every day
- Use chewies or bite exercises if your dentist recommends them to seat each aligner fully
- Attend every review appointment even when everything feels fine
- Tell your dentist promptly if an aligner stops fitting or a gap appears over the moving tooth

[Read More: How Can Aligned Teeth Benefit Your Health Beyond Aesthetics](#)

Tooth Extrusion for Dentists: Clinical Considerations

For clinicians extrusion remains a movement that separates well-planned cases from disappointing ones. Points worth weighing before submission:

- Case selection. Assess root length, periodontal health and the amount of vertical movement required before choosing aligner therapy
- Slower staging with smaller increments typically improves tracking on extrusive movements
- Attachment protocol. Choose engager shape and placement for maximum vertical grip and consider the extended-beveled options for demanding cases
- Check for non-tracking at every review and intervene early rather than waiting for a refinement

ClearPath supports its partner clinicians through orthodontist-led treatment planning, a network of 5,000+ [certified dentists](#) and a 48-hour turnaround time. Whether the case is a single under-erupted lateral or part of a full open bite correction the platform is designed to handle cases from simple to complex.

Conclusion

- Tooth extrusion is a vertical movement that clear aligners can achieve when attachments and staging are planned well

- ClearPath Tri-Layer Technology delivers the gentle continuous force that extrusion needs
- Treatment is always doctor-led from the first scan to the final review

Start Your Clear Aligner Treatment with ClearPath

ClearPath Orthodontics has spent 20+ years reshaping the future of orthodontics. With 500,000+ cases treated, 1 million aligners manufactured and patients served across 26+ countries, ClearPath Aligners bring DRAP and FDA approved doctor-led treatment to smiles worldwide.

Patients: find out if clear aligners suit your case at patient.clearpathortho.com/am-i-a-candidate and book a consultation with a certified ClearPath dentist.

Dentists: bring predictable extrusion mechanics to your practice. Partner with ClearPath at clearpathortho.com/partner-with-us.



Reshaping the future of
orthodontics



Quick Links

[About](#)
[Our Product](#)
[Knowledge Center](#)
[Partner with us](#)
[Events](#)
[Careers](#)

Support

[Blogs](#)
[Contact Us](#)
[Privacy Policy](#)
[FAQs](#)

Contact Info

[+92 42 111 333 276](#)
support@clearpathortho.com
6N, Main Boulevard Johar Town,
Lahore

