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Okay, let's talk about why traditional braces can sometimes be a headache for kids and how AI might just change the game.

Think about it: traditional orthodontics, while effective, isn't exactly a walk in the park for children. Braces help correct misaligned teeth in children Braces for kids and teens dental braces. We're talking about years of metal brackets glued to teeth, poked by wires, and requiring constant tightening. Compliance is a major hurdle. Getting kids to diligently brush around all those brackets, avoid sticky foods that can break things, and consistently wear elastics? That's a monumental task. A missed elastic here and there might not seem like a big deal, but over time, it can significantly extend treatment time and impact the final result.

Then there's the discomfort. Braces adjustments often cause pain and soreness, making eating and even talking uncomfortable for a few days. This can lead to irritability and a general negative association with the orthodontic process. Plus, let's face it, some kids are self-conscious about wearing braces. The visual impact can affect their confidence, especially during those already awkward adolescent years.

Beyond the patient experience, traditional orthodontics relies heavily on the orthodontist's skill and experience. Predicting tooth movement accurately is crucial, but it's not an exact science. Minor miscalculations or unforeseen biological responses can lead to mid-treatment adjustments and prolonged treatment times.

So, the current challenges are multi-faceted: patient compliance, discomfort, aesthetic concerns, and the inherent limitations in predicting individual tooth movement. This is where the promise of Al-driven aligners comes in, offering a potential solution to many of these issues by leveraging technology to create more predictable, comfortable, and aesthetically pleasing treatment options.

Al-Driven Aligners: Seeing the Future of Your Smile

Okay, so we all know about aligners, right? Those clear plastic trays that gently nudge your teeth into a straighter position. But what if I told you things are getting a whole lot smarter? We're talking Aldriven aligners, and they're changing the game by predicting tooth movement with, dare I say, spooky accuracy.

Think about it. Traditionally, an orthodontist plans your treatment based on their experience and knowledge, often using models and X-rays. That's great, but every mouth is different. Now, AI steps in and analyzes mountains of data – thousands of past cases, scans, and biomechanical principles – to build a super-detailed, personalized model of *your* mouth.

This AI model can then simulate how your teeth will respond to different aligner designs and treatment plans. It's like a virtual crystal ball for your smile. Instead of just guessing, the AI can predict which movements will be most effective, which areas might be stubborn, and even anticipate potential problems before they arise.

The result? More efficient treatment, fewer mid-course corrections, and ultimately, a straighter smile in less time. It's not magic, it's smart science. And it's making the journey to a perfect smile a whole lot smoother.

# \* Preventive measures to maintain periodontal health during orthodontic treatment.

Okay, let's talk AI and teeth. Specifically, those clear aligners that are all the rage. We've all seen the ads, promising straighter smiles with less hassle. But what's really exciting is how artificial intelligence is starting to supercharge the whole process.

Think about it: traditional aligner treatment, while effective, can be a bit of a guessing game. Your orthodontist takes impressions, figures out a plan, and then creates a series of aligners to gradually shift your teeth. But everyone's mouth is different. Sometimes teeth move as predicted, sometimes they don't, leading to adjustments and longer treatment times.

This is where AI comes in. Imagine a system that can analyze your unique dental structure, predict how your teeth will *actually* move in response to each aligner, and then optimize the entire treatment

plan from the start. That's the promise of Al-driven aligners.

The benefits? First, potentially reduced treatment time. By accurately predicting tooth movement, the AI can create a more efficient sequence of aligners, minimizing the need for mid-course corrections. Second, fewer appointments. Less fine-tuning means less time spent in the orthodontist's chair. And finally, improved comfort. A more precise treatment plan can translate to less pressure and discomfort as your teeth shift.

It's not magic, of course. Al is a tool, and its effectiveness depends on the quality of the data it's trained on and how well it's integrated into the overall treatment process. But the potential is huge. Aldriven aligners aren't just about straighter teeth; they're about smarter, more efficient, and more comfortable orthodontic care. It's a glimpse into a future where technology truly personalizes healthcare, one smile at a time.

# \* The role of oral hygiene instructions for children and parental involvement.

Al-driven aligners that predict movement sound like something out of a sci-fi movie, right? But they're actually a fascinating reality, especially when you consider their potential impact on orthodontics for children. Instead of just vaguely hoping the aligners do their job, these systems use artificial intelligence to learn from vast datasets of past treatments, essentially predicting how teeth will move in response to specific aligner designs. This means potentially faster, more accurate, and less uncomfortable treatment for kids.

Think about it: traditional orthodontics can be a bit of a guessing game, requiring frequent adjustments and sometimes unexpected results. Now, imagine a scenario where an AI analyzes a child's unique dental structure, predicts how their teeth will respond to a particular aligner sequence, and even suggests modifications to the treatment plan before any aligners are even fabricated.

While widespread, rigorously documented case studies are still emerging, we're starting to see promising examples. One could envision a case where a young patient with a severe overbite is treated with AI-designed aligners. The AI, having learned from thousands of similar cases, predicts that the molars will need slight intrusion to create space for the front teeth to retract. The aligners are then precisely designed to achieve this, minimizing the need for mid-treatment refinements and ultimately shortening the overall treatment time. Another example might involve a child prone to relapse after traditional orthodontic treatment. The AI could analyze the underlying skeletal structure and predict areas of potential instability, allowing the aligner design to incorporate features that specifically address these areas, preventing relapse.

These examples, while still somewhat hypothetical in their fully realized AI-driven form, point towards a future where orthodontic treatment for children is far more predictable and efficient. As the technology matures and more data becomes available, we'll undoubtedly see a surge in documented case studies showcasing the transformative potential of AI in guiding aligner therapy for young patients. The promise of straighter teeth, shorter treatment times, and fewer headaches for both kids and their parents is certainly something to smile about.

# \* Early detection and management of periodontal problems during orthodontic care.

Okay, so let's talk about these Al-powered teeth straighteners. We've all seen the ads for clear aligners, right? They promise a straighter smile without the metal-mouth look of traditional braces. But now we're adding Al to the mix, and it makes you wonder, is it just hype, or are we really seeing something new?

Think about it this way. Traditional braces, they're kind of like a skilled artisan painstakingly crafting something. The orthodontist bends wires, adjusts brackets, relying on years of experience and a good

eye to guide your teeth into place. It works, but it can be a bit of a guessing game, fine-tuning as you go.

Then came the clear aligners – companies offering a more comfortable and aesthetically pleasing experience. But the effectiveness can vary. Some people swear by them, others find them less predictable than braces, especially for complex cases. It's a bit like comparing a custom tailored suit to something off the rack; the fit might not be perfect for everyone.

Now, enter AI. The promise here is that the AI can analyze your teeth, predict how they'll move in response to the aligners, and then optimize the treatment plan. Imagine it as a super-smart assistant for your orthodontist. It crunches the data, identifies potential roadblocks before they happen, and suggests the most efficient path to your perfect smile.

The potential benefits are pretty exciting. Shorter treatment times, fewer refinements, and maybe even better results overall. But, and there's always a but, this technology is still relatively new. We need more long-term studies to really know how well it stacks up against the tried-and-true methods.

So, are Al-driven aligners the future of orthodontics? Maybe. They definitely have the potential to be. But for now, it's about understanding the options, talking to your orthodontist, and figuring out what's the best fit for your individual needs and smile goals. It's not a magic bullet, but it's a fascinating step forward.

# \* Collaboration between orthodontists and periodontists for optimal outcomes.

Al-driven aligners that promise to predict tooth movement? Sounds futuristic, right? Cool tech aside, parents are going to have questions. Big ones. We're talking about their kids' health, their bank accounts, and the long-term impact.

Let's start with safety. Are these aligners made from materials that are safe for my child to wear for extended periods? What kind of radiation, if any, is involved in the scanning process? Are there any unforeseen risks associated with the Al's predictions? Parents need assurance that this isn't some untested experiment happening in their child's mouth. Clear, transparent answers about the materials used, the technology behind the predictions, and potential side effects are crucial.

Then comes the elephant in the room: cost. Orthodontic treatment is already a significant investment. How does this Al-driven approach compare to traditional braces or other aligner options in terms of price? Does the Al actually reduce the overall treatment time, thus potentially lowering costs? Are there hidden fees or extra expenses involved? Parents need a clear breakdown of the costs and a solid understanding of the potential value proposition.

Finally, and perhaps most importantly, there's the question of long-term effectiveness. Does the AI truly improve outcomes? Does it lead to more stable and predictable results? What happens if the AI's predictions are off? What kind of recourse is available if the treatment doesn't go as planned? Parents want to know that this isn't just a short-term fix, but a solution that will provide lasting benefits for their child's oral health and overall well-being. They need evidence-based research and testimonials to convince them that the AI is more than just a gimmick, and that it truly contributes to a better, healthier, and more confident smile in the long run. Ultimately, it boils down to trust. Can parents trust that this technology will deliver on its promises, safely and effectively?

Okay, so we're talking about Al and how it might shake up the world of kids' braces, right? Specifically, Al-driven aligners that can *predict* how teeth will move. That's pretty wild when you think about it. Imagine a future where instead of just guessing and adjusting, orthodontists have Al whispering in their ear, "Hey, if you nudge this tooth *this* way, it'll shift everything else *that* way, and you'll hit your

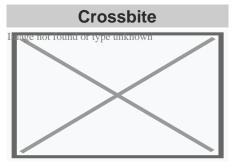
target in X amount of time."

For pediatric orthodontics, this could be a game-changer. Kids are already often anxious about braces. If AI can make the treatment faster, more predictable, and maybe even less uncomfortable, that's a huge win. Think about fewer appointments, more accurate results, and potentially even preventing some of those awkward mid-treatment surprises.

And then there's the whole "personalized treatment plan" angle. Every kid's mouth is different. All can crunch tons of data – scans, X-rays, even maybe genetic information down the line – to create a treatment plan that's tailored to that specific child's needs. It's not just about straightening teeth; it's about optimizing their bite, their jaw alignment, and even their long-term dental health, all based on what the All predicts will work best for them.

Of course, we're not quite there yet. There are still challenges to overcome – making sure the AI is accurate, ethical, and doesn't replace the important human element of care. But the potential is definitely there for AI to revolutionize how we straighten kids' teeth and create healthier, happier smiles. It's a pretty exciting prospect, and something to keep a close eye on.

#### **About crossbite**

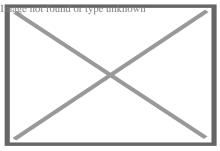


Unilateral posterior crossbite

**Specialty** Orthodontics

In dentistry, **crossbite** is a form of malocclusion where a tooth (or teeth) has a more buccal or lingual position (that is, the tooth is either closer to the cheek or to the tongue) than its corresponding antagonist tooth in the upper or lower dental arch. In other words, crossbite is a lateral misalignment of the dental arches.[1][2]

#### **Anterior crossbite**



Class 1 with anterior crossbite

An anterior crossbite can be referred as negative overjet, and is typical of class III skeletal relations (prognathism).

## **Primary/mixed dentitions**

[edit]

An anterior crossbite in a child with baby teeth or mixed dentition may happen due to either dental misalignment or skeletal misalignment. Dental causes may be due to displacement of one or two teeth, where skeletal causes involve either mandibular hyperplasia, maxillary hypoplasia or combination of both.

#### **Dental crossbite**

[edit]

An anterior crossbite due to dental component involves displacement of either maxillary central or lateral incisors lingual to their original erupting positions. This may happen due to delayed eruption of the primary teeth leading to permanent teeth moving lingual to their primary predecessors. This will lead to anterior crossbite where upon biting, upper teeth are behind the lower front teeth and may involve few or all frontal incisors. In this type of crossbite, the maxillary and mandibular proportions are normal to each other and to the cranial base. Another reason that may lead to a dental crossbite is crowding in the maxillary arch. Permanent teeth will tend to erupt lingual to the primary teeth in presence of crowding. Side-effects caused by dental crossbite can be increased recession on the buccal of lower incisors and higher chance of inflammation in the same area. Another term for an anterior crossbite due to dental interferences is *Pseudo Class III Crossbite or Malocclusion*.

#### Single tooth crossbite

Single tooth crossbites can occur due to uneruption of a primary teeth in a timely manner which causes permanent tooth to erupt in a different eruption pattern which is lingual to the primary tooth.[3] Single tooth crossbites are often fixed by using a finger-spring based appliances.[4][5] This type of spring can be attached to a removable appliance which is used by patient every day to correct the tooth position.

#### Skeletal crossbite

[edit]

An anterior crossbite due to skeletal reasons will involve a deficient maxilla and a more hyperplastic or overgrown mandible. People with this type of crossbite will have dental compensation which involves proclined maxillary incisors and retroclined mandibular incisors. A proper diagnosis can be made by having a person bite into their centric relation will show mandibular incisors ahead of the maxillary incisors, which will show the skeletal discrepancy between the two jaws.[<sup>6</sup>]

#### **Posterior crossbite**

[edit]

Bjork defined posterior crossbite as a malocclusion where the buccal cusps of canine, premolar and molar of upper teeth occlude lingually to the buccal cusps of canine, premolar and molar of lower teeth. Posterior crossbite is often correlated to a narrow maxilla and upper dental arch. A posterior crossbite can be unilateral, bilateral, single-tooth or entire segment crossbite. Posterior crossbite has been reported to occur between 7–23% of the population. In the most common type of posterior crossbite to occur is the unilateral crossbite which occurs in 80% to 97% of the posterior crossbite cases. In Posterior crossbites also occur most commonly in primary and mixed dentition. This type of crossbite usually presents with a functional shift of the mandible towards the side of the crossbite. Posterior crossbite can occur due to either skeletal, dental or functional abnormalities. One of the common reasons for development of posterior crossbite is the size difference between maxilla and mandible, where maxilla is smaller than mandible. In Posterior crossbite can result due to

- Upper Airway Obstruction where people with "adenoid faces" who have trouble breathing through their nose. They have an open bite malocclusion and present with development of posterior crossbite.<sup>[12]</sup>
- Prolong digit or suckling habits which can lead to constriction of maxilla posteriorly[<sup>13</sup>]
- Prolong pacifier use (beyond age 4)[<sup>13</sup>]

#### **Connections with TMD**

## Unilateral posterior crossbite

#### [edit]

Unilateral crossbite involves one side of the arch. The most common cause of unilateral crossbite is a narrow maxillary dental arch. This can happen due to habits such as digit sucking, prolonged use of pacifier or upper airway obstruction. Due to the discrepancy between the maxillary and mandibular arch, neuromuscular guidance of the mandible causes mandible to shift towards the side of the crossbite.[14] This is also known as Functional mandibular shift. This shift can become structural if left untreated for a long time during growth, leading to skeletal asymmetries. Unilateral crossbites can present with following features in a child

- Lower midline deviation[<sup>15</sup>] to the crossbite side
- Class 2 Subdivision relationships
- Temporomandibular disorders [16]

#### **Treatment**

#### [edit]

A child with posterior crossbite should be treated immediately if the child shifts their mandible on closing, which is often seen in a unilateral crossbite as mentioned above. The best age to treat a child with crossbite is in their mixed dentition when their palatal sutures have not fused to each other. Palatal expansion allows more space in an arch to relieve crowding and correct posterior crossbite. The correction can include any type of palatal expanders that will expand the palate which resolves the narrow constriction of the maxilla.[9] There are several therapies that can be used to correct a posterior crossbite: braces, 'Z' spring or cantilever spring, quad helix, removable plates, clear aligner therapy, or a Delaire mask. The correct therapy should be decided by the orthodontist depending on the type and severity of the crossbite.

One of the keys in diagnosing the anterior crossbite due to skeletal vs dental causes is diagnosing a CR-CO shift in a patient. An adolescent presenting with anterior crossbite may be positioning their mandible forward into centric occlusion (CO) due to the dental interferences. Thus finding their occlusion in centric relation (CR) is key in diagnosis. For anterior crossbite, if their CO matches their CR then the patient truly has a skeletal component to their crossbite. If the CR shows a less severe class 3 malocclusion or teeth not in anterior crossbite, this may mean that their anterior crossbite results due to dental interferences.[17]

Goal to treat unilateral crossbites should definitely include removal of occlusal interferences and elimination of the functional shift. Treating posterior crossbites early may help prevent the occurrence of Temporomandibular joint pathology.[18]

Unilateral crossbites can also be diagnosed and treated properly by using a Deprogramming splint. This splint has flat occlusal surface which causes the muscles to deprogram themselves and establish new sensory engrams. When the splint is removed, a proper centric relation bite can be diagnosed from the bite.[19]

### **Self-correction**

[edit]

Literature states that very few crossbites tend to self-correct which often justify the treatment approach of correcting these bites as early as possible.[9] Only 0–9% of crossbites self-correct. Lindner et al. reported that 50% of crossbites were corrected in 76 four-year-old children.[20]

#### See also

[edit]

- List of palatal expanders
- Palatal expansion
- Malocclusion

#### References

- 1. \* "Elsevier: Proffit: Contemporary Orthodontics · Welcome". www.contemporaryorthodontics.com. Retrieved 2016-12-11.
- 2. A Borzabadi-Farahani A, Borzabadi-Farahani A, Eslamipour F (October 2009). "Malocclusion and occlusal traits in an urban Iranian population. An epidemiological study of 11- to 14-year-old children". European Journal of Orthodontics. 31 (5): 477–84. doi: 10.1093/ejo/cjp031. PMID 19477970.
- 3. ^ **a b** Kutin, George; Hawes, Roland R. (1969-11-01). "Posterior cross-bites in the deciduous and mixed dentitions". American Journal of Orthodontics. **56** (5): 491–504. doi:10.1016/0002-9416(69)90210-3. PMID 5261162.
- 4. ^ Zietsman, S. T.; Visagé, W.; Coetzee, W. J. (2000-11-01). "Palatal finger springs in removable orthodontic appliances--an in vitro study". South African Dental Journal. 55 (11): 621–627. ISSN 1029-4864. PMID 12608226.
- 5. \* Ulusoy, Ayca Tuba; Bodrumlu, Ebru Hazar (2013-01-01). "Management of anterior dental crossbite with removable appliances". Contemporary Clinical Dentistry. 4 (2): 223–226. doi:10.4103/0976-237X.114855. ISSN 0976-237X. PMC 3757887. PMID 24015014.
- 6. ^ Al-Hummayani, Fadia M. (2017-03-05). "Pseudo Class III malocclusion". Saudi Medical Journal. **37** (4): 450–456. doi:10.15537/smj.2016.4.13685. ISSN 0379-5284. PMC

- 4852025. PMID 27052290.
- 7. \*\*Bjoerk, A.; Krebs, A.; Solow, B. (1964-02-01). "A Method for Epidemiological Registration of Malocculusion". Acta Odontologica Scandinavica. 22: 27–41. doi:10.3109/00016356408993963. ISSN 0001-6357. PMID 14158468.
- 8. ^ Moyers, Robert E. (1988-01-01). Handbook of orthodontics. Year Book Medical Publishers. ISBN 9780815160038.
- 9. ^ **a b c** Thilander, Birgit; Lennartsson, Bertil (2002-09-01). "A study of children with unilateral posterior crossbite, treated and untreated, in the deciduous dentition--occlusal and skeletal characteristics of significance in predicting the long-term outcome". Journal of Orofacial Orthopedics. **63** (5): 371–383. doi:10.1007/s00056-002-0210-6. ISSN 1434-5293. PMID 12297966. S2CID 21857769.
- 10. ^ Thilander, Birgit; Wahlund, Sonja; Lennartsson, Bertil (1984-01-01). "The effect of early interceptive treatment in children with posterior cross-bite". The European Journal of Orthodontics. 6 (1): 25–34. doi:10.1093/ejo/6.1.25. ISSN 0141-5387. PMID 6583062.
- 11. ^ Allen, David; Rebellato, Joe; Sheats, Rose; Ceron, Ana M. (2003-10-01). "Skeletal and dental contributions to posterior crossbites". The Angle Orthodontist. **73** (5): 515–524. ISSN 0003-3219. PMID 14580018.
- 12. \* Bresolin, D.; Shapiro, P. A.; Shapiro, G. G.; Chapko, M. K.; Dassel, S. (1983-04-01). "Mouth breathing in allergic children: its relationship to dentofacial development". American Journal of Orthodontics. 83 (4): 334–340. doi:10.1016/0002-9416(83)90229-4. ISSN 0002-9416. PMID 6573147.
- ^ a b Ogaard, B.; Larsson, E.; Lindsten, R. (1994-08-01). "The effect of sucking habits, cohort, sex, intercanine arch widths, and breast or bottle feeding on posterior crossbite in Norwegian and Swedish 3-year-old children". American Journal of Orthodontics and Dentofacial Orthopedics. 106 (2): 161–166. doi:10.1016/S0889-5406(94)70034-6. ISSN 0889-5406. PMID 8059752.
- 14. ^ Piancino, Maria Grazia; Kyrkanides, Stephanos (2016-04-18). Understanding Masticatory Function in Unilateral Crossbites. John Wiley & Sons. ISBN 9781118971871.
- A Brin, Ilana; Ben-Bassat, Yocheved; Blustein, Yoel; Ehrlich, Jacob; Hochman, Nira; Marmary, Yitzhak; Yaffe, Avinoam (1996-02-01). "Skeletal and functional effects of treatment for unilateral posterior crossbite". American Journal of Orthodontics and Dentofacial Orthopedics. 109 (2): 173–179. doi:10.1016/S0889-5406(96)70178-6. PMID 8638566.
- Pullinger, A. G.; Seligman, D. A.; Gornbein, J. A. (1993-06-01). "A multiple logistic regression analysis of the risk and relative odds of temporomandibular disorders as a function of common occlusal features". Journal of Dental Research. 72 (6): 968–979. doi:10.1177/00220345930720061301. ISSN 0022-0345. PMID 8496480. S2CID 25351006.
- 17. ^ COSTEA, CARMEN MARIA; BADEA, MÎNDRA EUGENIA; VASILACHE, SORIN; MESAROÃfÆ'Æâ€™Ãf†Ã¢â,¬â,,¢ÃfÆ'ââ,¬Â Ãf¢Ã¢â€šÂ¬Ã¢â€žÂ¢ÃfÆ'Æâ€™Ãf', MICHAELA (2016-01-01). "Effects of CO-CR discrepancy in daily orthodontic treatment planning". Clujul Medical. 89 (2): 279–286. doi:10.15386/cjmed-538. ISSN 1222-2119. PMC 4849388. PMID 27152081.

- 18. \* Kennedy, David B.; Osepchook, Matthew (2005-09-01). "Unilateral posterior crossbite with mandibular shift: a review". Journal (Canadian Dental Association). **71** (8): 569–573. ISSN 1488-2159. PMID 16202196.
- 19. ^ Nielsen, H. J.; Bakke, M.; Blixencrone-Møller, T. (1991-12-01). "[Functional and orthodontic treatment of a patient with an open bite craniomandibular disorder]". Tandlaegebladet. **95** (18): 877–881. ISSN 0039-9353. PMID 1817382.
- Lindner, A. (1989-10-01). "Longitudinal study on the effect of early interceptive treatment in 4-year-old children with unilateral cross-bite". Scandinavian Journal of Dental Research. 97 (5): 432–438. doi:10.1111/j.1600-0722.1989.tb01457.x. ISSN 0029-845X. PMID 2617141.

#### **External links**

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Classification

D

• **ICD-10**: K07.2

o ICD-9-CM: 524.27

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#### **Orthodontics**

- Bolton analysis
- Cephalometric analysis
- Cephalometry
- Dentition analysis
- Failure of eruption of teeth
- Diagnosis
- Little's Irregularity Index
- Malocclusion
- Scissor bite
- Standard anatomical position
- Tooth ankylosis
- Tongue thrust

- Overbite
- Overjet
- o Open bite
- Crossbite
- Dental crowding
- Dental spacing
- o Bimaxillary Protrusion
- o Prognathism
- Retrognathism
- o Maxillary hypoplasia
- o Condylar hyperplasia
- Overeruption
- Mouth breathing
- o Temperomandibular dysfunction
- o ACCO appliance
- o Archwire
- Activator appliance
- Braces
- Damon system
- Elastics
- o Frankel appliance
- Invisalign
- o Lingual arch
- Lip bumper
- Herbst Appliance
- List of orthodontic functional appliances

#### **Appliances**

**Conditions** 

- List of palatal expanders
- Lingual braces
- Headgear
- Orthodontic technology
- Orthodontic spacer
- Palatal lift prosthesis
- Palatal expander
- Quad helix
- Retainer
- SureSmile
- Self-ligating braces
- Splint activator
- Twin Block Appliance

- Anchorage (orthodontics)
- o Cantilever mechanics
- Fiberotomy
- o Interproximal reduction
  - Intrusion (orthodontics)
  - Molar distalization
  - ∘ SARPE
  - Serial extraction
  - o Beta-titanium
  - Nickel titanium
  - Stainless steel
  - o TiMolium
  - Elgiloy
  - o Ceramic
  - o Composite
  - Dental elastics

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#### **Organizations**

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- Society for Orthodontic Dental Technology (Germany)

#### Journals

- o American Journal of Orthodontics and Dentofacial Orthopedics
- The Angle Orthodontist
- Journal of Orthodontics

#### Institution

Angle School of Orthodontia

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Dental disease involving the jaw

Jaw abnormality

General • malocclusion

Orthodontics

Gnathitis

Size

- Micrognathism
- Maxillary hypoplasia

**Maxilla and Mandible** 

- Cherubism
- Congenital epulis
- Torus mandibularis
- Torus palatinus

- Jaw and base of cranium
  - o Prognathism
  - Retrognathism

Other

- Dental arch
  - o Crossbite
  - Overbite
- o Temporomandibular joint disorder

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