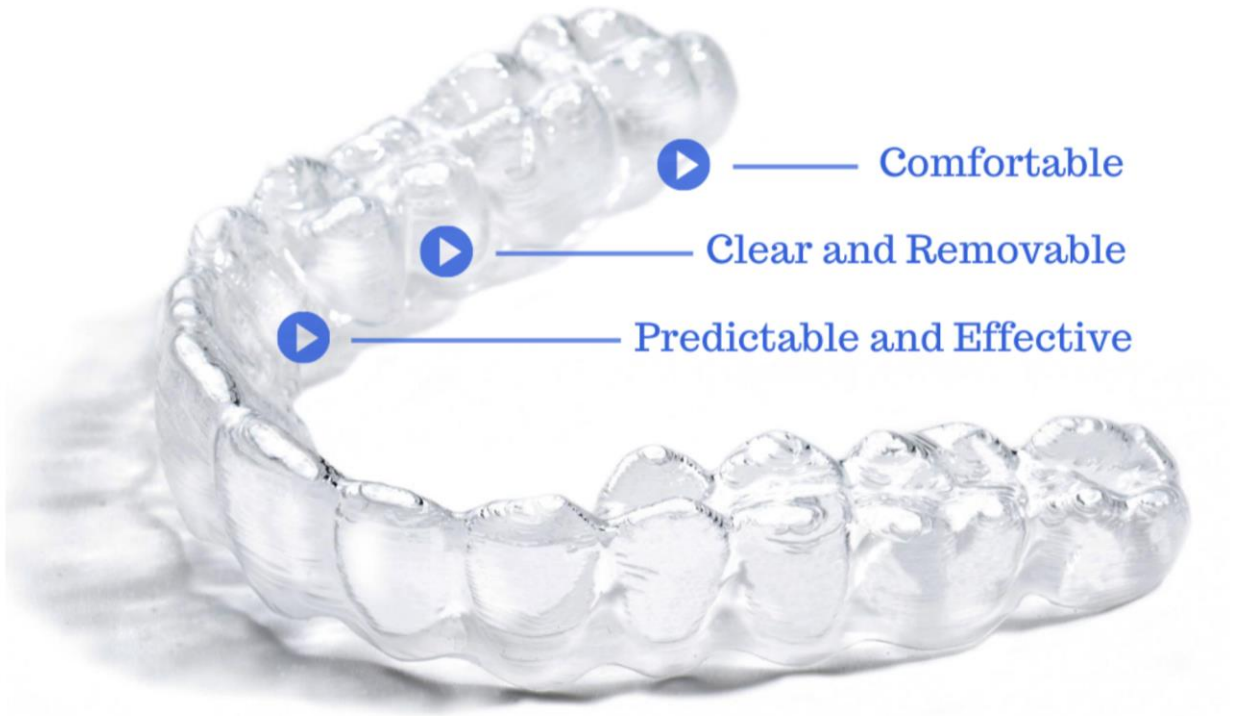
ACTIVE ALIGNERS

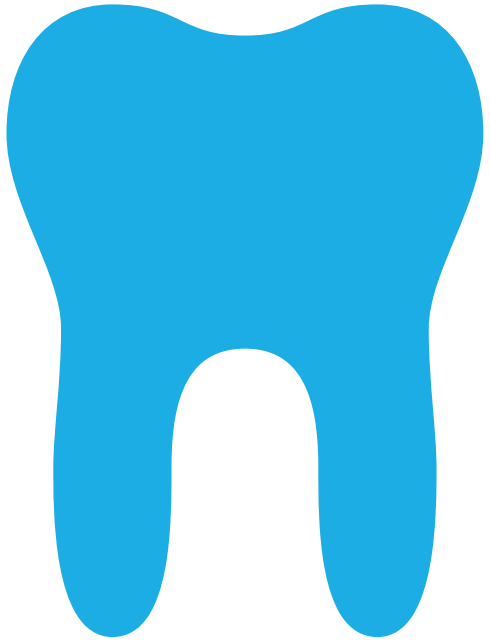


Clinical Symptoms (Case selection), Movement Philosophy & Protocols

CLINICAL SYMPTOMS

INDICATIONS FOR ACTIVE ALIGNERS TREATMENT

- Mis-alignment of teeth from first pre-molar to first pre-molar
- Crowding of teeth
- Spacing of teeth
- Pre-restorative anterior alignments (pre-planning for veneers etc.)
- Beneficial anterior aesthetic treatments only
- Mild posterior alignments



Indications for Active Aligner Therapy

ACTIVE ALIGNERS

TREATMENT PLAN – FULL ARCH OR ANTERIOR ONLY?

Anterior Case Selection

Treatable:

- Mild Spacing
- Mild Crowding
- Midline Discrepancy <2mm (with IPR)
- Deepbite (<2mm of anterior intrusion)
- Basic alignment prior to restorative work
- Mild Anterior open bite correction (less than 2mm)
- Lower incisor extraction (space closure <2mm)
- Bicuspid extraction (space closure <2mm)
- Mild anterior cross bite

Not Treatable:

- Midline discrepancy >2mm
- Severe deep bite
- Severe skeletal open bite
- Severe crowding
- Class III bite
- Underbite
- Full posterior crossbite correction

Anterior Case Selection:

- Mild to moderate anterior, esthetic cases
- Preparation for Veneers, implants, or other dental restorations
- DTC style offering
- No molar movements
- Generally straighter teeth
- Refinement or relapse cases

ACTIVE ALIGNERS

TREATMENT PLAN – FULL ARCH OR ANTERIOR ONLY?

Posterior Case Selection

Treatable:

- Mild/Moderate Spacing
- Mild/Moderate Crowding
- Improving cusp/fossae relationship
- Class 1 correction
- Mild Class II correction
- Extraction cases
- Open bites
- Deep bites
- Anterior or Posterior crossbite*
- Edge to edge bite

Not Treatable:

- Full posterior crossbite correction
- Class III bite
- Bite change
- Severe deep bite
- Severe skeletal open bite
- Midline discrepancy >2mm

Posterior Case Selection:

- Mild to moderate cases
- Preparation for Veneers, implant placement, or other dental restorations
- Molar uprighting

ACTIVE ALIGNERS

CANDIDACY

(CASE SELECTION -INCL TEENS)

- Only fully erupted permanent dentition (no primary teeth or erupting teeth)
- Ensure enough clinical crown is available to support the aligner and facilitate movement
- X-rays (Ceph or Pan) is a critical tool to ensure no impacted, non-erupted or missing, or ankylosed teeth and to assist in the diagnosis of developmental concerns that may be needed to take into consideration for treatment planning and candidacy
- Patient needs to be committed, motivated and responsible – compliance is key
- Ideal cases are where space can be created through expansion and proclination, with limited IPR. Mild to moderate crowding is acceptable. Avoid severe malocclusions.
- Avoid Cases with deep curves of Spee in the lower arch (ie lower incisors over erupted)
- Avoid Possible over advancement of the lower incisors
- Avoid iatrogenically induced gingival recession especially in the lower anterior region
- Avoid Larger open bites extending beyond the anterior segments

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TREATMENT PLAN – CASE SELECTION TIPS

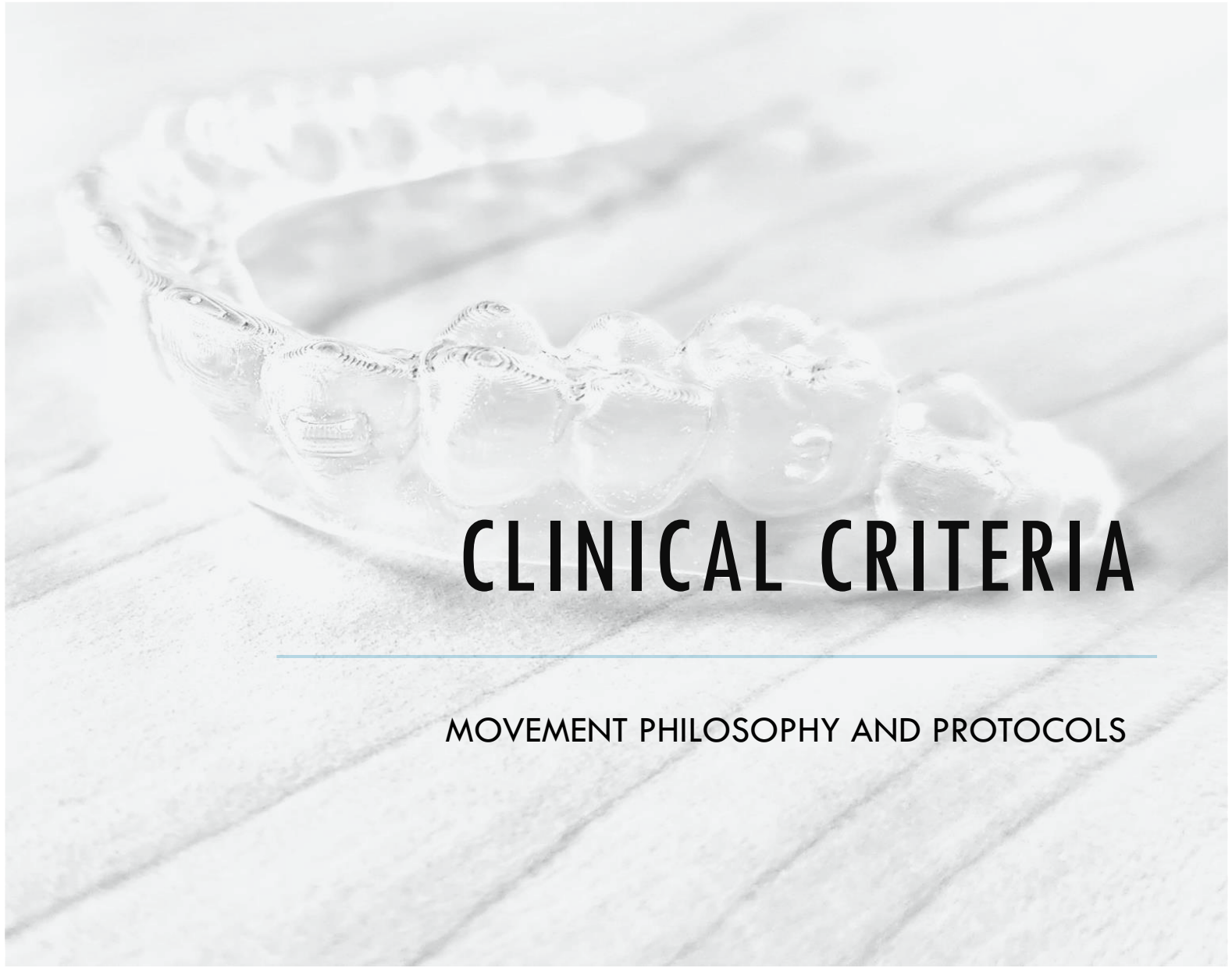
The only way to be sure if a patient is a candidate for Active Aligners is to submit the case for treatment planning. This does carry a treatment plan fee which is refunded if the case is rejected for Active Aligner treatment by the planners. We can also, unfortunately, not predict the cost as this is based on the complexity and number of aligners required to complete the treatment.

GOOD CASES TO BEGIN WITH:

- Minor anterior spaces or Crowding
- Ortho Relapses
- Single Arch treatment (minor changes need for desired outcome)

PROGRESS TO:

- Moderate anterior spaces or Crowding
- Minor to Moderate Overjet and Overbite Correction
- Class II and class III Cases



CLINICAL CRITERIA

MOVEMENT PHILOSOPHY AND PROTOCOLS

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OUR ALIGNER AND MOVEMENT PHILOSOPHY IS BASED ON:

1. Being the **least invasive**,
2. Using **maximum arch expansion**
3. **Allowing minimal IPR** (interproximal reduction) requirements
4. **Use of attachments where necessary** to ensure predictable movement and outcomes

Our clinical criteria allow Active Aligners to do the following for teeth movement:

- 4-6mm of crowding or spacing, with a maximum of 2-3mm overlap
- Up to 40% Degrees of rotation
  - Protocol 1 - 28° anterior (5° posterior teeth without attachment)
  - Protocol 2 - 32° anterior with attachment (pre-molar movements allowed)
  - Protocol 3 - 40° anterior with attachment (molar movements allowed)
  - 1.5mm of expansion per side
  - 1.5mm overbite correction per arch for intrusion or extrusion (with attachments)
  - 14° tooth inclination
  - 4mm per arch IPR limitation

ACTIVE ALIGNERS – MOVEMENT PHILOSOPHY

Protocol 1 – Anterior Movement without attachments

ANTERIOR MOVEMENTS

Description	Case maxims
Rotation:	28° on 3-3 5° on premolars
Inclination:	7°
Angulation:	7°
Forward/Backward:	On the lower arch: use the most buccal tooth as a reference point
Extrusion:	None
Intrusion:	2.5mm
Left/Right:	2.5mm

POSTERIOR (FULL ARCH) MOVEMENTS

Description	Per Tray maxims
Rotation:	2°
Inclination:	1°
Angulation:	1°
Forward/Backward:	.25mm
Extrusion:	.25mm
Intrusion:	.25mm
Left/Right:	.25mm

ACTIVE ALIGNERS – MOVEMENT PHILOSOPHY

Protocol 2 – Anterior Movement with attachments

ANTERIOR MOVEMENTS

Description	Case maxims
Rotation:	40°
Inclination:	14°
Angulation:	14°
Forward/Backward:	On the lower arch: use the most buccal tooth as a reference point
Extrusion:	2.5mm
Intrusion:	2.5mm
Left/Right:	2.5mm

POSTERIOR (FULL ARCH) MOVEMENTS

Description	Per Tray maxims
Rotation:	2°
Inclination:	1°
Angulation:	1°
Forward/Backward:	.25mm
Extrusion:	.25mm
Intrusion:	.25mm
Left/Right:	.25mm

ACTIVE ALIGNERS – MOVEMENT PHILOSOPHY

Protocol 3 – Full Arch Movement with attachments

ANTERIOR MOVEMENTS

Description	Case maxims
Rotation:	40°
Inclination:	14°
Angulation:	14°
Forward/Backward:	On the lower arch: use the most buccal tooth as a reference point
Extrusion:	2.5mm
Intrusion:	2.5mm
Left/Right:	2.5mm

POSTERIOR (FULL ARCH) MOVEMENTS

Description	Per Tray maxims
Rotation:	30°
Inclination:	10°
Angulation:	5°
Forward/Backward:	Distalization: 2mm** Mesialization: 1.5mm
Extrusion:	1mm
Intrusion:	2mm
Left/Right:	2.5mm**

**Especially applicable to upper molars

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TREATMENT PLAN – FULL ARCH OR ANTERIOR ONLY?

Full Arch Movement Additional Details

Protocol details:

- Molar movement generally refers to positioning of the upper and lower first molars
- Second molars can be addressed when necessary, to a lesser extent
- Third molars are not to be included in most cases
- Upper molars have more movement possibilities than lower molars due to differences in the anatomy of the maxilla and mandible
- Lower molars generally can't be expanded, mainly, uprighted

Protocol details:

- Some movements are less predictable and auxiliary techniques will be advisable (vibration/microosteoperforation)
- There are limitations to molar movements that are case specific and can be related to crown/root morphology, bone quantity/quality, age, health status, and compliance
- Full Posterior crossbite cases may not be treatable, edge to edge crossbite is treatable
- Not offering sequential molar distalization

Posterior Case Selection:

- Mild to moderate cases
- Preparation for Veneers, implant placement, or other dental restorations
- Molar uprighting

ACTIVE ALIGNERS –

WE ARE HERE FOR YOU EVERY STEP OF THE WAY

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