INDIRECT TRIPODING FOR VERTICAL

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General Information

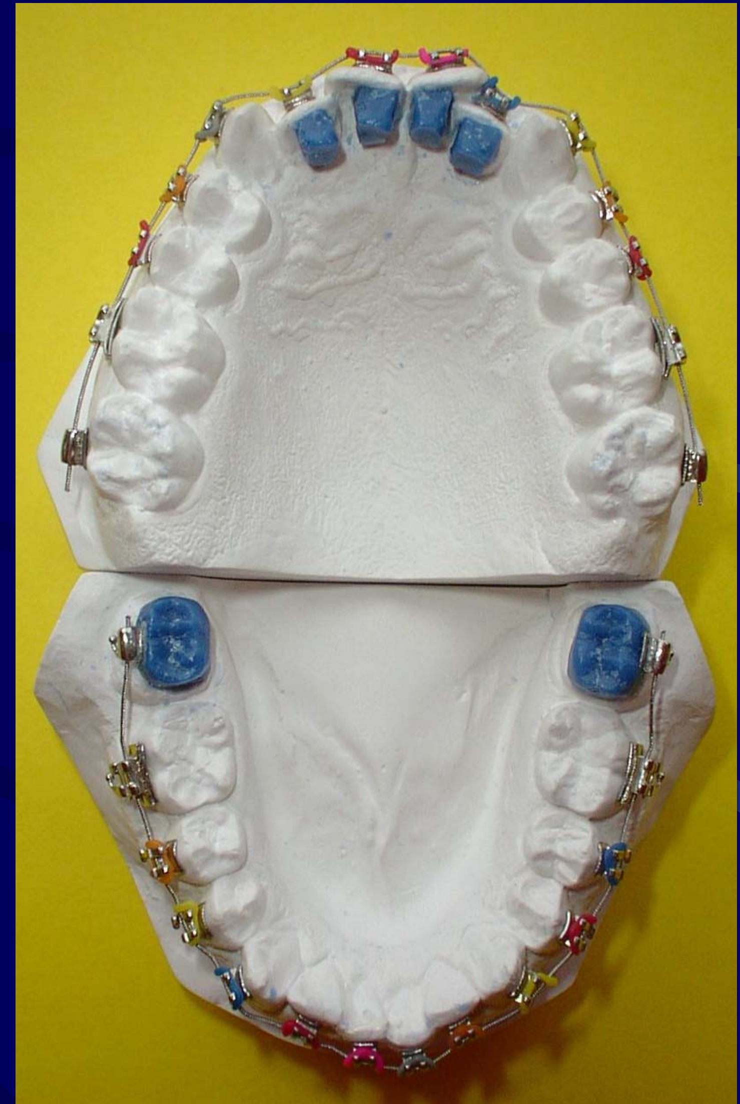
- The “Indirect Tripoding Technique” presented in this video is easier to tolerate and more hygienic for a patient than an acrylic orthopedic appliance, which may hold the mandible in class I ideal vertical.
- This technique is ideal for half tooth class II cases.
- The limitations for tripoding are full tooth class II cases in adults or late teens.
- Half Tooth Class II Division II cases may best be treated by upper arch alignment prior to tripoding.

TRIPODING FOR VERTICAL

In some cases, it is best to begin maxillary arch treatment in order to align the upper incisors to some degree before the ramps are placed.

TRIPODING FOR VERTICAL

- This technique would require that the archwire extend into the elevated bracket slot height of the Md 2nd molars.
- The lower 2nd molar brackets are incorporated into the occlusal pads when the "Indirect Tripoding Technique" is utilized.
- Once the lower arch is in occlusion 1st molar to 1st molar, remove the occlusal resin from the lower 2nd molars and place a new 2nd molar bracket on the buccal surface of the lower 2nd molars so they may erupt rapidly into occlusion.

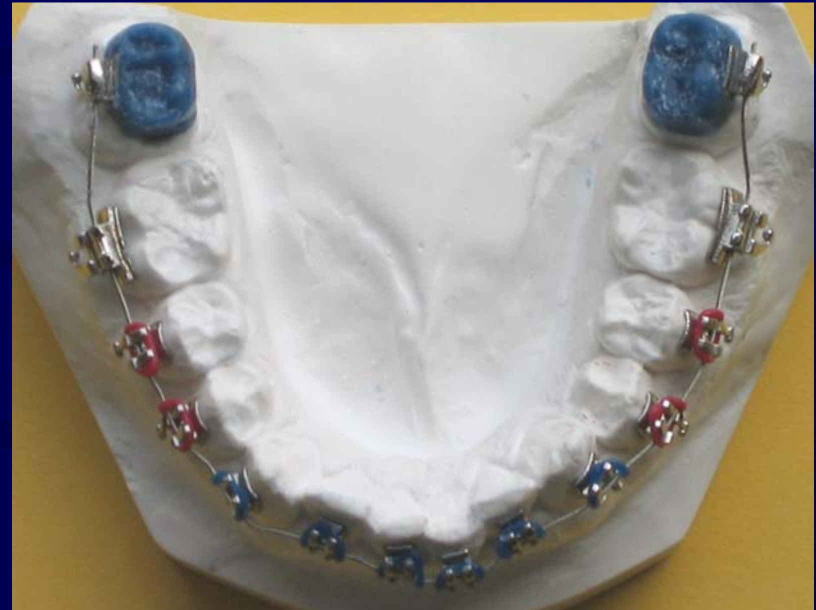


Anterior Tripoding for Vertical

- Tripod lingual to the upper four incisors with steep individual lingual ramps to maintain ideal vertical and anterior/posterior relationship.
- Steep ramps will ensure the mandible postures in a dictated position. This is especially beneficial in class II tendency cases.
- The ramps should not cause deflection back into class II.

Interproximal Separation

- Be sure the lower interproximal contacts are free otherwise vertical will not increase.
- Once the initial archwires round out the arches, consider slenderizing a minimal amount in the mandibular posterior quadrants or place separating elastics as required.

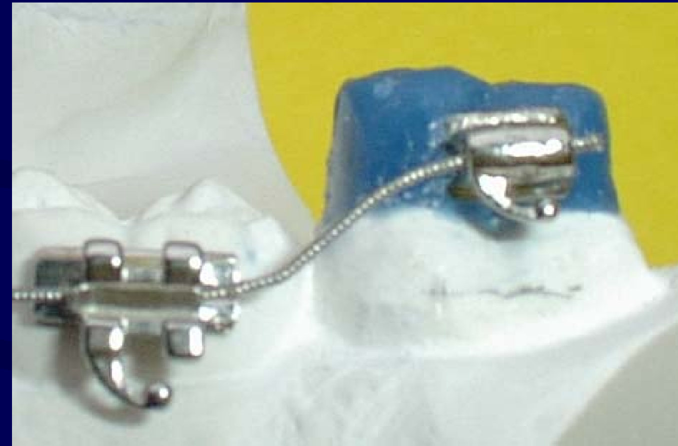


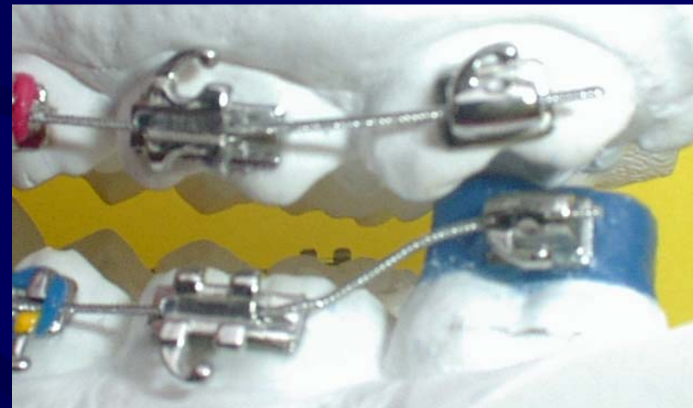
Vertical Box Elastics to Expedite Vertical

- The patient should wear 1/4” 2-1/2 ounce vertical box elastics 24/7 excluding meals or at least after supper until breakfast.
- The elastics extend from the upper cuspids/1st&2nd bicuspids to the lower 1st & 2nd bicuspids.
- Place different colored ligating elastics for easy identification for the patient to hook-up the vertical box elastics.

Posterior Tripoding for Vertical

- Place tripoding resin over the occlusal surface of the lower 2nd molars to the same vertical established with the incisal resin ramps.
- Directly place the 2nd molar brackets to the buccal surface of the occlusal resin, which would follow the same buccal contour as the 2nd molars in order to expedite vertical in the mandibular arch.





Tripoding for Vertical

- Theoretically, at this point the "NEW" vertical has been established from the cuspids to the 1st molars.
- You would leave the incisal ramps to hold A-P and support the new vertical until you place the final archwire.
- Meanwhile, engage the lower 2nd molar tube with a light archwire in order to expedite its vertical. Perhaps a .016x.022 Level 8.

Common Archwire Series

- .0175 Coaxial Level 6
- (Optional) .016 Nickel Titanium
  - Generally not required if the incisors are flared.
  - Useful for severe rotations of anterior teeth.
- .016x.022 Level 8
- .018x.025 BTM
- .021x.025 BTM
- Use each archwire for a period of six-weeks each and the final archwire for four periods of six-weeks
- The indirect setup would include 2nd molar to 2nd molar in the Mx arch, 1st molar to 1st molar in the Md arch when tripoding
- Four Md 2nd molar brackets for your direct placement
  - **(unless you are using the "Indirect Tripoding Technique")**

Retention

- **Retention is the patient’s responsibility**
- A class I patient who originally had a deep bite should be retained with a standard Hawley retainer with a flat passive anterior bite plane.
- A class II patient may require a small ramp to hold A-P and vertical in order to avoid a dual bite.
- Mx retention is required full time for six months followed by three-years during sleep. Lifetime for adult cases.
- Loss of vertical results in reoccurrence of lower incisor crowding and possible TMJD symptoms.
- A lower 3x3 retainer is recommended for a minimum of two or three years on average.

Laboratory Requirement for "Indirect Tripoding"

- Please provide the laboratory with a construction bite with the patient in Ideal Anterior/Posterior (A-P) relationship and Ideal Vertical.
- Indirect anterior ramps and posterior occlusal pads will be fabricated to this position.
- Lower 2nd molar brackets will be placed buccally to the resin pads.
- Mx & Md Casts