

Hawley Retainers & Adjunctive Techniques

Karl Grimes
29th July 2026

1

Objectives

- Understand the design and rationale behind a Hawley retainer
- Explain the design and indications for its use
- Understand the principles of adjunctive procedures to enhance stability

2

Hawley retainer

- The Hawley retainer is the original removable retainer.
- It is a simple and robust appliance made from an acrylic baseplate with a metal labial bow
- It was originally designed as an active removable appliance, but it became clear that it could be used as a retainer to maintain the teeth in the correct position after treatment.

3

Design



- Labial bow UPR3–UL3 or LPR3–LL3, 0.7 mm.
- Adam's cribs upper 6s or lower 6s, 0.7 mm.
- Palatal baseplate (full coverage or horseshoe design).
- Variations:
 - labial bow soldered to the Adam's Crib, which means there are fewer wires to interfere with the occlusion
 - acrylated labial bow, which helps prevent relapse of corrected rotations
 - the addition of anterior bite planes to control the reduction of a deep overbite
 - Hawley retainers can also be used in the lower arch

4

Advantages

- Facilitates posterior occlusal settling
- A bite plane can also be incorporated to maintain overbite reduction
- Pontics can be added to temporarily replace a missing tooth
- Can be activated to close residual spaces
- Maintain lateral expansion due to rigidity



5

Disadvantages

- Compromised aesthetics due to the labial bow
- May cause initial speech interferences due to the palatal coverage.
- However, this can be minimized by opting for 'horse shoe' design

6

- When replacing missing teeth, it is advisable to put rigid metal stops on the retainer mesial and distal to any prosthetic tooth, to prevent relapse.
- Hawley retainers also allow more rapid vertical settling of teeth than clear plastic retainers, due to the lack of complete occlusal coverage.
- Various adaptations are possible, depending on the case:
- Acrylic facing can be added to the labial bow to help control rotations.
- A reverse U-loop can be used to control the canine position.

7

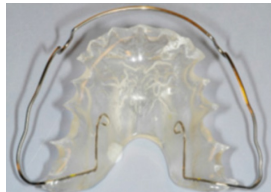
- A passive bite-plane can be added to maintain corrections of deep overbites.
- The labial bow can be soldered to the cribs, so there are fewer wires to cross the occlusal surfaces and interfere with the occlusion.
- Clear polyethylene bow to provide improved aesthetics



8

Begg 'wraparound' retainer

- Begg wire extending from UR6– UL6 or LR6–LL6, 0.8 mm
- U loops at site of extraction or premolar region
- Palatal baseplate in the case of upper Begg retainer



9

Design of Begg retainer

- Begg wire extending from UR6– UL6 or LR6–LL6
- 0.8 mm in diameter
- U loops at site of extraction or premolar region
- Palatal baseplate in the case of upper Begg retainer

10

Adjunctive techniques

- Additional soft and hard tissue procedures, usually used in addition to retainers, to help enhance stability:
- Pericision
- Interproximal reduction

11

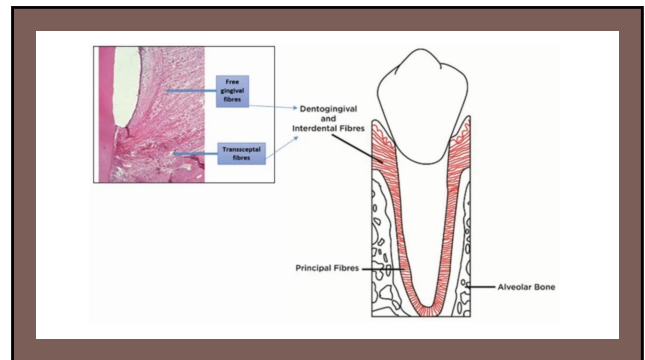
Pericision

- This is also known as circumferential supracrestal fibreotomy.
- The principle is to cut the interdental and dento-gingival fibres above the level of the alveolar bone
- The elastic fibres within the interdental and dento-gingival fibres have a tendency to pull the teeth back towards their original position.
- This is particularly true with teeth that have been de-rotated.

12

- Pericision is a simple procedure undertaken under local anaesthetic and requires no periodontal dressing afterwards.
- The cuts are made vertically into the periodontal pocket, severing the supra-alveolar fibres around the neck of the teeth, but taking care not to touch the alveolar bone.
- The technique has been shown to reduce rotational relapse by up to 30% and is most effective in the maxilla.
- There are no adverse effects on the periodontal health, provided there is no evidence of inflammation or periodontal disease before the pericision.

13



14



15

Interproximal reduction

- This is also known as reproximation or enamel stripping
- The removal of small amounts of enamel mesiodistally has been used to reshape teeth and to create small amounts of space
- It has been suggested that by flattening the interdental contacts, this will increase the stability between adjacent teeth.

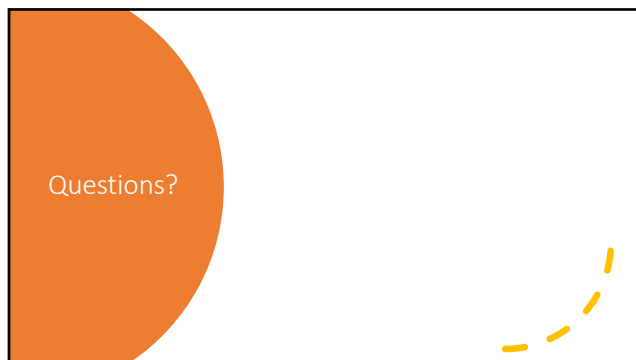
16

- It may also be the case that by removing small amounts of tooth tissue any minor crowding is relieved
- Avoid possible proclination of the lower labial segment and increase in the intercanine width, both of which are potentially unstable movements.

17

IPR

18



19