

TECHNIQUE CLINIC

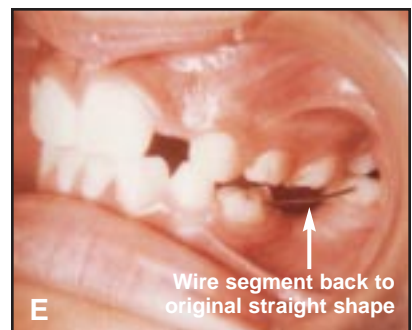
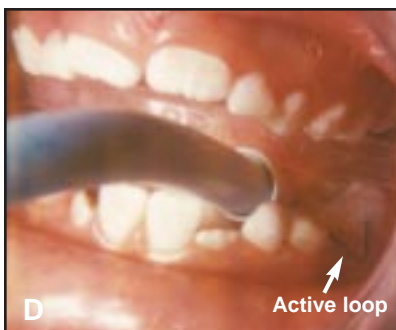
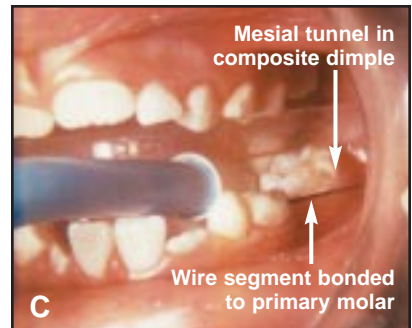
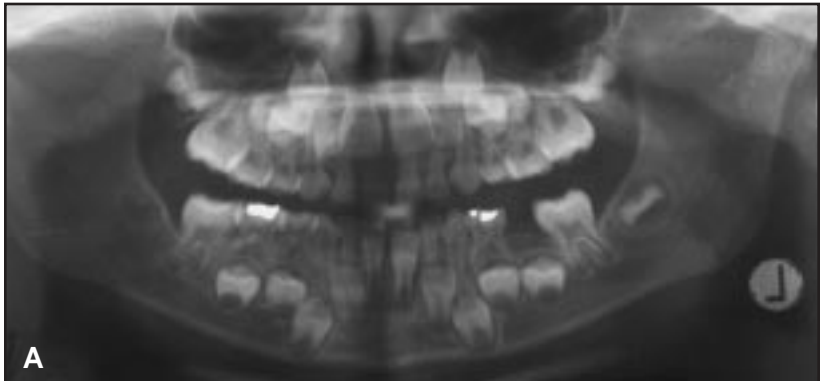
A Nickel Titanium Space Regainer-Retainer

With technological advances in archwires have come creative new ways to treat classic orthodontic problems. In 1983, I introduced the concept of covering a nickel titanium archwire with plastic tubing to, in effect, convert the archwire into a spring.¹ Similarly, I have recently begun using a nickel titanium archwire segment to regain and retain lost space. When the wire is bonded as an active loop, it acts as a spring for space opening.

In the case shown here, the patient prematurely lost the mandibular left second primary molar (A). The space subsequently collapsed (B), and I decided to regain it with the following technique.

We bonded a composite dimple on the buccal of the mandibular left first molar (C). As the composite set, we used an explorer to burrow a tunnel into the mesial of the dimple, creating a composite tube that was open only on the mesial end. The nickel titanium archwire segment was then bonded to the primary molar and extended beyond the dimple.

After the composite had set on both teeth, we used a bird-beak plier to direct the free end of the archwire into the tunnel we had made in the dimple on the first molar (D). This created a loop that activated the archwire



into a spring. We then ran a little bonding material around the entrance of the wire segment into the composite tunnel to make the attachment more permanent (this is an optional step).

Over time, the loop returned to its original straight shape, distalizing and uprighting the mandibular left first molar (E). Thus, we used the primary molar as a disposable anchor.

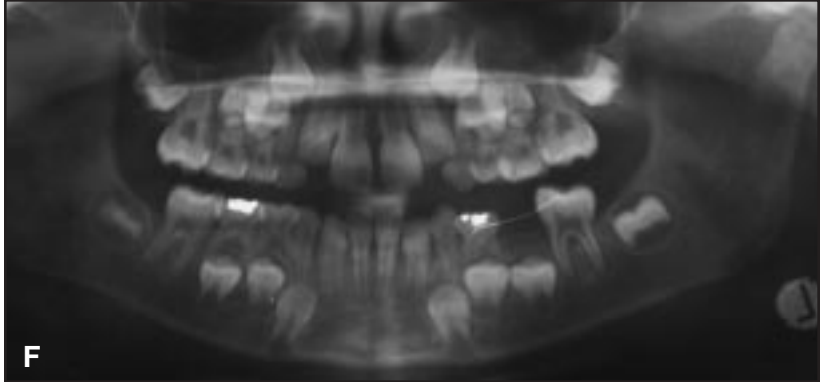
Once the active correction was complete, we left the wire segment in place as a passive retainer (F).

Although we continue to see the patient for routine observation visits, the space regainer-retainer has needed no adjustments after its initial placement.

Conclusion

Advantages of this technique include:

- The appliance is made in one visit.
- No impressions or outside laboratory procedures are required.
- No bands need to be fit.
- A primary tooth is used as a disposable anchor.
- No adjustments are needed.
- The appliance is self-cleaning.
- Minimal patient cooperation is required.



REFERENCES

1. Dimond, H. Jr.: Anterior crossbite correction, *J. Clin. Orthod.* 17:326-327, 1983.



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