



## Pinnacle Positioner (PP)- A Clinical Innovation

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### Introduction

A dental splint is an appliance designed for the immobilization or stabilization of loose/mobile teeth. Splinting provides rest during periodontal wound healing and comfort/support in performing a function in cases of reduced/weakened periodontium.

In orthodontics, the stability of the final occlusion is as important as the correction achieved. Since the beginning of the century, fixed retainers have been recommended after correction of malocclusion (rotation, crowding, space closure etc.).

However, bonding a lingual wire is still challenging as it requires a long working time and has a risk of contamination from saliva and moisture which can cause bonding failure. Several techniques are used to keep the retainer wire in the proper position during direct bonding, of lingual bonded retainers. Proper placement helps prevent occlusal wear of the composite over the retainer wire, thus reducing the risk of breakage.

This article describes a new chairside time-saving, reusable wire positioner that allows accurate placement and direct bonding of all types of fixed lingual retainers/periodontal splinting with solid or multistrand wires.

## **Fabrication**

Armamentarium used to fabricate the Pinnacle retainer positioner.

- a) #139 (bird beak) plier.
- b) 0.019-inch × 0.025-inch SS wire (0.021-inch × 0.025 inches can also be used)
- c) Used O-ring module stem.
- d) Wire Cutter.
- e) Tube sleeve.

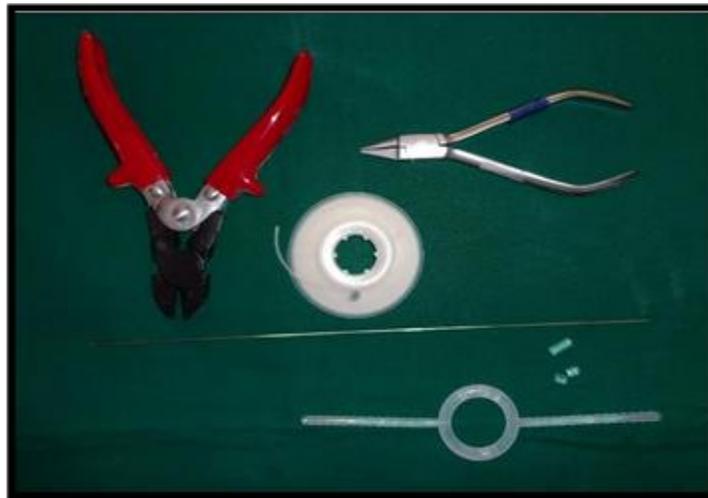


Figure 1

## **Methodology**

STEP 1: Take 0.019 inch × 0.025 inch SS wire to make a helix as shown in below Figure.

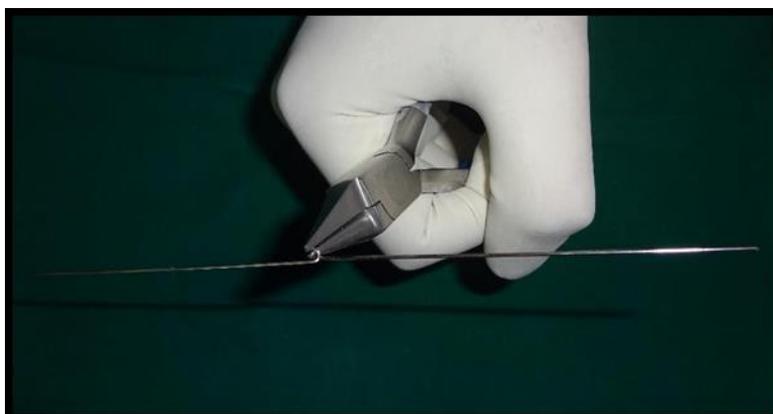


Figure 2

STEP 2: 2mm away from the helix bend the wire on both the sides as shown in the below figure

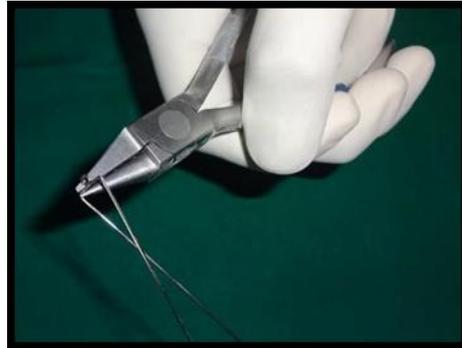


Figure 3

STEP 3: With one end of the arm, pierce the small cylindrical piece (measuring approx 4-5mm in length) and secure it by giving a V bend.



Figure 4

STEP 4: With the other end of the arm, bend a right angle at the end of the wire.

STEP 5: Insert the tube sleeve and secure it with the bend.

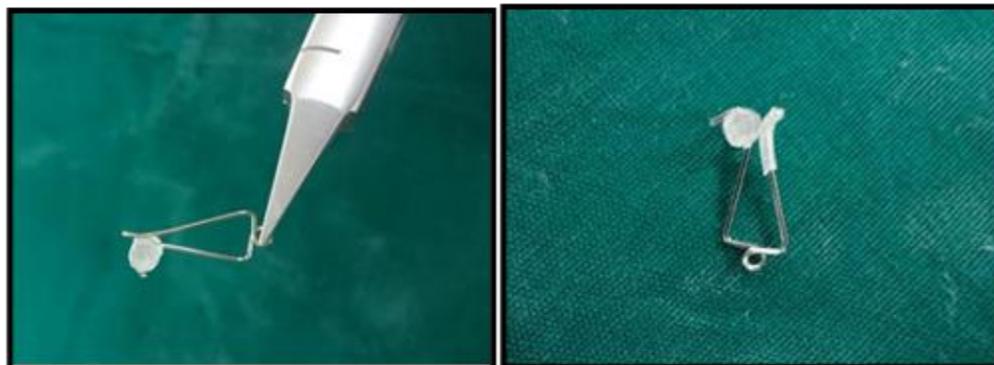


Figure 5

### Advantages

- a) Precise placement of the splinting wire retainer.
- b) Ease of fabrication at chairside.
- c) Time saving, as customization for each patient is not needed.
- d) Economical, (19\*25 SS is easily available in the clinic),
  - Minimal armamentarium required
- e) No need for fabricating transfer trays.
- f) Easy to place with minimal patient discomfort.
- g) NO Gingival irritation or harm.
- h) No clean-up is required.
- i) Can be sterilized and reused.

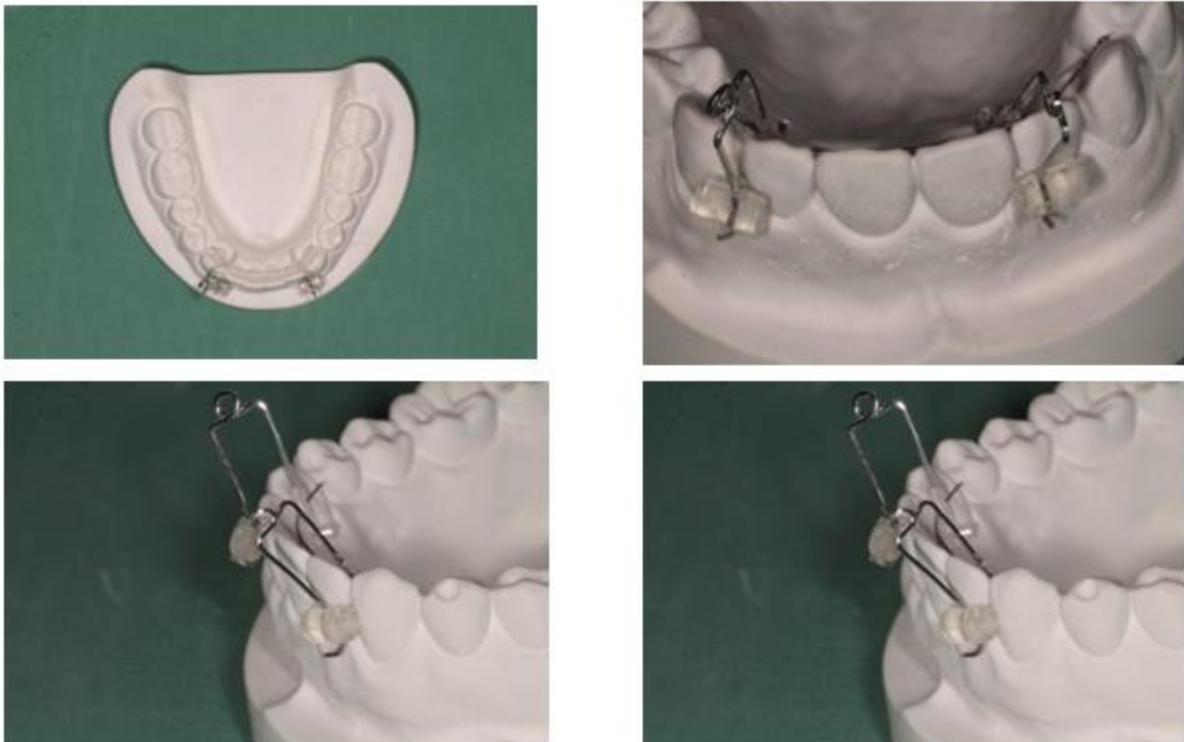


Figure 6. Pinnacle Positioner placed on the model stabilizing co-axial wire from canine to canine.



Figure 7. Splinting done for periodontal compromised lower anteriors using pinnacle positioners.



Figure 8. Working of Pinnacle Positioner for orthodontic fixed lingual retainer.