A guide for simple mini-implant placement

Smriti Malhotra, BDS, MDS
Prashant Nanda, BDS, MDS
Maninder Singh Sidhu, BDS, MDS

The proper placement of mini-implants is very important because of the increased risk of implant failure when inserted too close to the roots of adjacent teeth. This can interfere with orthodontic treatment. This simple guide for mini-implant placement is easy and can reduce chair time. ORTHODONTICS (CHIC) 2012;13:166–167.

Key words: guide, mini-implant

Precise positioning of mini-implants is extremely important for their success. There is an increased risk of implant failure if the mini-implants are inserted too close to the roots of adjacent teeth. If placed improperly, they may interfere with orthodontic tooth movement. Various methods are mentioned in the literature, some of which include the use of an adjustable surgical guide, a grid for accurate mini-implant placement, or a three-dimensional computer-aided design/computer-assisted manufacture (CAD/CAM) template. Although these methods aid in accurate placement of mini-implants, the techniques involve the use of complicated, cumbersome devices that cannot be fabricated chairside.

We have developed a guide for the accurate placement of mini-implants that is simple in design and easy to use chairside.

The procedure for its fabrication is as follows:

- Take a 0.017 × 0.025-inch stainless steel wire and make a helix approximately 4 mm in diameter using a bird-beak pliers.
- Then, mark the site where the implant is to be placed. Bend the two ends of the helix so one end goes inside the buccal tube and one is ligated to the premolar bracket (Figs 1a and 1b).
- Take a panoramic radiograph to determine whether the position of the helix is correct (Fig 1c). If it is, place the mini-implant inside the helix (Figs 1d and 1e).

This simple method will help clinicians place mini-implants with greater precision as well as save time.
Fig 1  Clinical images demonstrating a technique for placing mini-implants.

“Precise positioning of mini-implants is extremely important for their success.”

REFERENCES