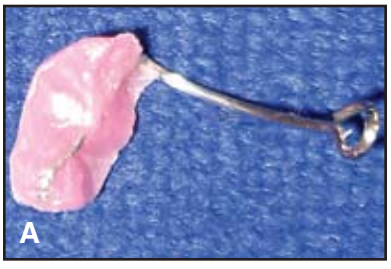
TECHNIQUE CLINIC

Precise, Simultaneous Bracket and Miniscrew Placement

We have developed a simple, reliable, and accurate method for placing brackets and miniscrew implants in a single step. The procedure is as follows:

- Fabricate a miniscrew stent by bending a round stainless steel wire on the working cast, forming one end into a helix at the planned position of the miniscrew and securely embedding the other end in cold-cure acrylic covering the occlusal surface. The resin should be carefully adapted to obtain a good negative reproduction of the crown (A).
- Prepare an elastomeric transfer tray that incorporates the acrylic index. Place the tray with the index in the mouth, and take a radiograph to verify the position of the miniscrew stent (B). Alter the wire as necessary to avoid placing a miniscrew too near the root surfaces.
- Place the brackets on the working cast, using the indirect system described by Sondhi.[1]
- Tack the miniscrew stent to the cast using a light-cured adhesive (C).
- Fabricate another transfer tray from elastomeric impression material, incorporating the miniscrew stent and the brackets as a single unit (D).



- Inject a small amount of local anesthetic at the miniscrew placement site.
- Isolate, etch, and prepare the teeth and the bracket bases, using an indirect bonding adhesive.*
- Place the transfer tray in the mouth, and leave it in position after the recommended two-minute curing period.
- Using the helix as a guide, make an indentation at the miniscrew site with a round bur (E).

*Sondhi Rapid Set Indirect Bonding Adhesive, trademark of 3M Unitek, 2724 S. Peck Road, Monrovia, CA 91016; www.3Munitek.com.


F


G


H

• Drill a pilot hole at the indentation with a drill one size smaller than the miniscrew, then insert the miniscrew (F).

Post-placement radiographs can be taken to verify the interradicular placement of the miniscrew (G). This technique can be used in anterior, buccal, and palatal locations (H).

REFERENCES

1. Sondhi, A.: Effective and efficient indirect bonding: The Sondhi Method, Semin. Orthod. 13:43-57, 2007.

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