Case report: immediate molar placement with Southern Implants MAX Implant

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■ Immediate placement of implants into molar extraction sites can be a challenge in achieving primary stability, as the extraction socket is typically wider then the implant to be placed. The widebody implants (5-6 mm in diameter) have been advocated for immediate molar placement. Frequently, the site must be grafted, delaying implant placement until after an appropriate period of healing.

Southern Implants, with this clinical circumstance in mind, developed a series of super-wide implants (the MAX Implants), designed specifically for immediate placement in molar sites. The MAX is available in 8 and 9 mm diameters with 7, 9 and 11 mm lengths. The implant has a threaded, tapered, roughened surfaced design that narrows at the crestal aspect. It is designed to be placed slightly subcrestal. The rounded apical area was designed to avoid tearing the maxillary sinus membrane. The greater degree of implant taper minimizes the chance of

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contact with adjacent roots. (Fig. 1)

The Max surgical placement, as with other implant designs, is directed toward preservation of the buccal plate during the extraction process. It is recommended that the protuberance of bone found between the buccal roots be preserved, as this is a key area of primary stability.

Osteotomy drills are utilized to remove bone at the furcation and then are followed by dedicated drills matching the geometry of the implant to be placed. Southern Implants has dedicated osteotomes (profile gauges) available to laterally shape the socket in preparation for implant placement. Additionally, dedicated taps are available and are recommended to minimize stress to the buccal plate during implant placement and help improve primary stability.



• Fig. 1: Southern Implants MAX implant with cover screw affixed.

Restoration of the implant is accomplished with either an abutment and cementable restoration or a screw-retained prosthesis. The MAX incorporates a platform switching feature. Titanium temporary cylinders are available as well as UCLA-type abutments for fabrication of custom abutments for either cemented or screw-retained restorations.

Case report

A 46-year-old male presented with the complaint of a loose crown. The exam noted that a ceramo-metal restoration present on his mandibular left first molar, which had prior endodontic treatment, was moderately mobile. Upon removal of the crown, it was noted that minimal coronal tooth structure was present, and radiographically, it was confirmed that the tooth had a poor prognosis from a restorative aspect. (Fig. 2)

To minimize trauma to the buccal plate and preserve this area of bone, the tooth was sectioned through the furcation, and the mesial and distal roots removed atraumatically. A pilot drill was introduced into the bone at the furcation and taken to the desired depth.

The site was progressively enlarged laterally and finished with the dedicated osteotomy drill. The profile gauge was inserted and depth checked to ensure that the implant would sit just subcrestal. The dedicated tap was then introduced into the site to the depth established.

An 8 by 11 mm MAX implant was carefully threaded into the prepared site and a cover screw placed. (Fig. 3)

About the authors

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• Fig. 2: Mandibular first molar with coronal structural breakdown presenting with non-restorability.



[•] Fig. 3: Southern Implants MAX implant placed immediately following extraction of the mandibular first molar.



• Fig. 4: MAX implant as terminal abutment at the maxillary second molar.

The MAX implant is also well-suited for maxillary molar applications for immediate placement. (Fig. 4)

Conclusion

The MAX implant from Southern Implants permits immediate placement into extraction molar sites. As this implant is able to achieve initial primary stability filling the extraction socket, the need for socket grafting is greatly reduced, and this shortens the treatment time associated with molar extraction sites in the observed delayed implant placement approach.

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