New Generation Tissue-Level Implant

- Tapered, self-tapping with micro-threads
- Compatible with Straumann’s 1-Stage implant
- Unique square/octagon internal connection
- Lightly blasted neck for 1- or 2-stage surgery
- More diameter options including 3.3mmD & 5.7mmD
- All-in-1 Packaging for added value.

SwissPlant Implant
with All-in-1 packaging includes:
Cover Screw, Healing Collar,
Transfer and Straight Abutment
with Snap-on Comfort Cap
SwissPlant EU price = €145

FEATURES AND BENEFITS
1. Body Design: Tapered with double-lead buttress threads
2. Surface/Body: SBM Medium Texture with 17 year history
3. Surface/Neck: SBM Light Texture for soft or hard tissue
4. Diameters: Standard 4.1mm and 4.8mm plus 3.3mm & 5.7mm
5. Platforms: Standard 4.8mm and 6.5mm internal octagon plus 3.7mm hex with Platform Switch
6. Fixture-mount/Transfer/Abutment: Engages square within octagon

* The 4.1mm and 4.8mm SwissPlant implants can be inserted into soft bone using Straumann’s drills. An additional drill is required for dense bone or countersinking for bone-level placement. Implant Direct’s ratchet, insertion tool and 1.25mmD hex tool are also required.
New Generation Bone-Level Implant

- Tapered, self-tapping with micro-threads
- Compatible with Zimmer’s Screw-Vent implant
- Color coded hex/bevel conical connection
- Platform switching interface
- More diameter options including 3.2mmD & 5.2mmD
- All-in-1 Packaging for added value.

FEATURES AND BENEFITS

1. **Body Design:**
   Evenly Tapered with self-tapping grooves from mid-point to apex.

2. **Thread Design:**
   Micro-threads with progressively deeper, double-lead, buttress threads.

3. **Surface Options - 17 year history:**
   SBM - medium rough texture; HA Coating below micro-threads.

4. **Diameter Options:**
   Six Diameters from 3.2mmD to 5.7mmD in 0.5mmD increments.

5. **Conical Connection:**
   Lead-in Bevel above Internal Hex - 23 year history (Niznick #4,960,381)
   Color Coded for easy Identification; Platform Switching on 3.2mmD, 4.2mmD and 5.2mmD Implants.

6. **Fixture-mount Packaging:**
   Fixture-mount standardizes insertion tools, serves as Transfer and can be shortened for use as Final Abutment.

Legacy™ 3 Implant

with All-in-1 packaging includes:
Cover Screw, Healing Collar, Transfer and Straight Abutment
Legacy3 EU price = €125

Prosthetic compatibility with Screw-Vent, BioHorizons and MIS Implants
Extraction, immediate implant placement and guided bone regeneration using a flapless approach

Introduction

Esthetic requirements for implant supported restorations include the presence of natural soft tissue contours, and to the extend possible, the full presence of the interdental papillae. Regardless of the technique used for tooth extraction, some degree of soft and hard tissue loss is inevitable. The use of guided tissue regeneration membranes over sockets has been shown to be one method to preserve bone after extraction, but most techniques involve the use of large flaps and even vertical incisions to achieve primary closure. Because of the unique features of Cytoplast® dense PTFE membranes and the ability of the membranes to remain exposed in the oral cavity without risk of infection, the soft tissue architecture, keratinized tissue width and position of the mucogingival junction adjacent to the socket can be preserved. Using the minimally invasive tunneling technique described in this article facilitates minimally invasive socket reconstruction avoiding vertical incisions and incision of the interdental papillae. The technique described can be used for immediate implant placement, as in this case, or for socket preservation using particulate graft material if a staged approach is desired.
Case Presentation

This is a 60-year-old female who presented with a crown-root fracture of a non-vital maxillary right central incisor. The crown was temporarily stabilized with composite resin bonded to the adjacent teeth (Fig. 1). Extraction of the tooth and immediate implant placement was planned. To minimize soft and hard tissue recession, a flapless, minimally invasive extraction technique was employed (Fig. 2). The tooth root was extracted using only an intrasulcular incision. A #15 blade was used to sever the periodontal ligament and create space for root luxation and elevation (Fig. 3). Next, a subperiosteal pocket was created on the buccal and palatal aspect of the socket using a micro periosteal elevator (Fig. 4). Following luxation and initial elevation of the root with the micro elevator, the tooth was removed with forceps (Fig. 5). The interdental papillae were carefully undermined and elevated. This can be done with a small periosteal elevator or curette (Fig. 6). All remaining soft tissue was removed from the interior and margins of the socket with a sharp curette (Fig. 7). The implant osteotomy was done in the standard fashion, with the implant being placed against the palatal wall of the socket (Fig. 8). The gap between the facial aspect of the implant and the buccal wall was filled with a combination of autogenous bone chips harvested from the implant osteotomy combined with allograft bone (Fig. 9). A textured, high-density PTFE barrier membrane is placed. The membrane is trimmed, then placed into the superioisteal pocket on the palatal aspect (Fig. 10). The membrane is then tucked under the facial flap (Fig. 11). Next, the membrane is tucked under the interdental papillae, taking care to keep the edge of the material a minimum of 1.0 mm away from adjacent tooth roots (Fig. 12). A single 3-0 PTFE suture is placed to further stabilize the membrane. The membrane is intentionally left exposed, as primary closure is not required in this technique (Fig. 13).

Figure 14 shows the surgical site at three weeks. The exposed membrane is easily removed by grasping with a tissue forcep. Topical anesthesia may be used, but local anesthesia is not necessary.

The site at six weeks after implant placement (three weeks after membrane removal), reveals keratinized mucosa forming across the former extraction site (Fig. 15).

Figure 16 shows the clinical view following placement of the implant abutment and acrylic provisional restoration.

Summary

The flapless technique described provides a minimally invasive approach to extraction with socket grafting or immediate implant placement. Because the interdental papilla remains intact, there is less disruption of blood supply. As a result, there is a greater potential for maintenance of soft tissue volume. In addition, the use of a dense PTFE membrane improves the predictability of immediate implant placement, excluding the requirement for primary closure and resultant disruption of soft tissue architecture.

Cytoplast® is a registered trademark of Osteogenics Biomedical, Inc.

© 2008 Osteogenics Biomedical, Inc. BBFY0607