Predictable Implant Abutment Selection

Over the past decade, the dental profession has witnessed an influx of abutment designs and techniques. The promise of aesthetics, predictability, and ease, however, are seldom realized. The fact is that every tooth to be replaced has its own anatomy, gingival tissues, contour, bone level, thinness, adjacent teeth, and other variables that are hardly "predictable." One or two types of abutments cannot be used in cases designed with predictable results. With the same abutments used in all cases, an aspect of treatment may be compromised (ie, occlusion design, aesthetics, food impaction, or the presence of a black line on the tissue).

Proper diagnosis for each tooth in each situation must be discussed with the surgeon and restorative dentist.

Figure 1. Zirconium abutment (21 Bioceramic, Palm Beach Gardens, FL) three months following stage implant placement.

Figure 2. MAC-pressed ceramic crown two weeks following abutment placement.

A proper grasp of critical areas (eg, connecting screw, angulation, parallelism, and implantSEd, with or without augmentation procedures) may possibly provide an acceptable result. Four parameters have remained constant: the width of the implant, depth of tissue, angulation of placement, and clearance of the opposing tooth. These parameters enable clinicians to select the appropriate abutment.

Abutment selection, however, cannot be accomplished until the tissues have properly healed. In this new generation of implant abutments, every implant clinician must have a provisional abutment available for all cases, to aid in determining the shape of the tooth being replaced, and to facilitate the final abutment. In the aesthetic zone, surrounding immediate restoration, the provisional abutment can help outline the site and maintain the height of the gingiva. During delayed healing placement, interim abutments are the first selection. A custom-made gold abutment may be the next choice due to its warmer color tone. In the posterior region, the issue is not related to color, but to anatomical shape that aids in proper occlusion. Many levels that require replacement may be larger than a 4 mm or 5 mm prefabricated abutment. Unfortunately, the discrepancy are healed after the restoration is completed using the radiograph is taken.

The future seems brighter with the introduction of computer-generated implant abutments (ie, Encode, Zirconium, Palm Beach Gardens) (Fig. After the initial impression taken, the Dental Laboratory technician, the final results are simple, cost-effective, and more predictable. Computer may potentially produce the appropriate abutment for every situation. Until then, clinicians will continue to strive for the best restorative options, using personal experience and techniques to obtain the perfect gingival architecture.

References

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