Pure ceramic rehabilitations: when excellence meets the fundamentals

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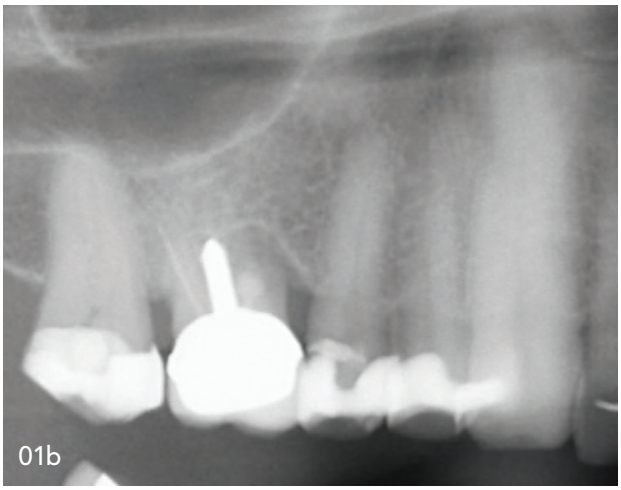

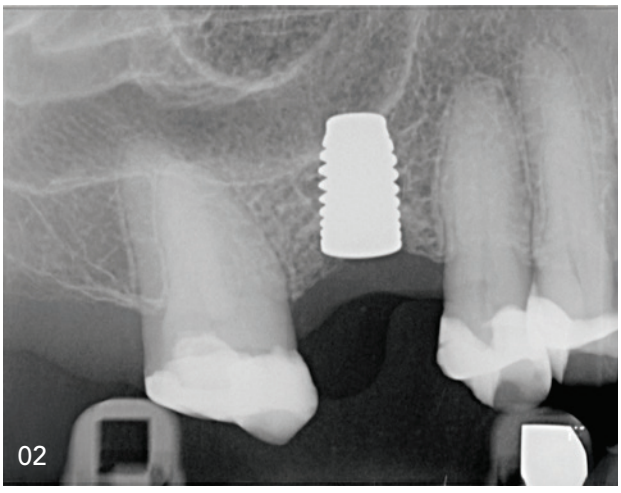

In dentistry, the foundation of successful outcomes lies in mastering the fundamentals. When combined with pioneering materials like ceramics, even the simplest treatments can achieve good results. Conversely, complex clinical cases often captivate clinicians with the challenge they present. Therefore, simple cases are sometimes underestimated, leading to undesired outcomes.

Outstanding clinicians excel by addressing every case with diligence, combining surgical and prosthetic precision. Alongside clinical skills, high-quality biomaterials and workflow-friendly systems are essential.

In terms of implant systems, the advantages of using metal-free zirconia implants are well-documented. The key benefits include low biofilm formation, absence of metallic particle release and enhanced soft-tissue attachment to implants and abutments, establishing zirconia implants as a valuable clinical recommendation.[1,2]

The present case demonstrates the placement of a Z-Systems Z5-BL zirconia implant in the upper right first molar region (Figs. 1a & b). Due to maxillary sinus pneumatisation, a bone level 5x8mm implant was selected (Fig. 2). After achieving

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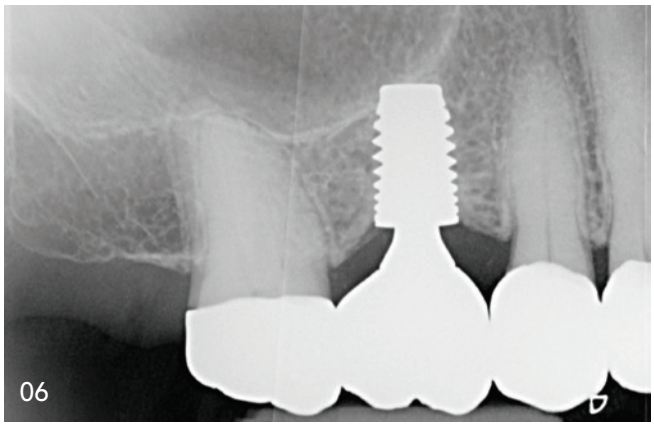

osseointegration, the implant was reopened (Fig. 3), and a zirconia abutment was selected for crown fabrication. The abutment was secured in place by the exclusive internal conical connection of Z-Systems' two-piece implants, which is activated by a zirconia screw (Fig. 4). The neighbouring teeth were also rehabilitated with full ceramic crowns (Fig. 5), and the case was finalised by restoring health, function, and aesthetics to the highest standard (Figs. 6 & 7).

References:

[1] Chen L, Tong Z, Luo H, Qu Y, Gu X, Si M. Titanium particles in peri-implantitis: distribution, pathogenesis and prospects. Int J Oral Sci. 23 Nov 2023; 15(1):49.

[2] Roehling S, Gahlert M, Janner S, Meng B, Woelfler H, Cochran DL. Ligature-induced peri-implant bone loss around loaded zirconia and titanium implants. Int J Oral Maxillofac Implants. March/April 2019; 34(2):357–365.

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