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Negotiating the severely resorbed extraction site: A clinical case report with histological sample”*

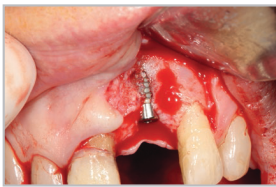
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David Kim, DDS, DMSc; Eli E. Machtei, DMD

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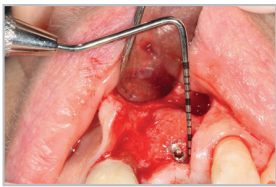


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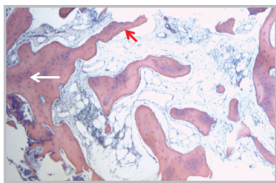
“Negotiating the severely resorbed extraction site: A clinical case report with histological sample”



After implant placement, a dehiscence defect was present, with 6 threads exposed.



Four months after the GBR procedure, significant ridge augmentation was achieved (approximately 8 mm).



At higher (100x) magnification, the viable bone trabeculae contained osteocytes (white arrow), and osteoblasts are also visible (red arrow).

Authors' affiliations

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SUMMARY.

The treatment of an infected socket with a severe facial dehiscence/fenestration defect presents a therapeutic dilemma to the dental team.

Both implant-supported restoration and fixed partial denture are viable options to restore function and occlusion, each with its benefits and disadvantages. In the present case report, a multi-stage regenerative approach was selected to enable an implant-supported single crown. The first phase of the treatment after extraction of the maxillary central incisor was the stabilization of the blood clot with a collagen plug.

Six weeks later, the surgical site was re-entered and the socket was grafted with biphasic calcium sulfate (BCS)*. Six months later, a dental implant was placed and a core biopsy taken. However, the central portion of the facial defect demonstrated only partial regeneration resulting in exposure of six implant threads. Freeze-dried bone allograft (FDBA) and a collagen membrane were put in this site to augment the ridge and cover the exposed threads. The histology of the bone core showed a complete resorption of the grafted material with the presence of new woven bone throughout the specimen. Clinically, complete defect regeneration and augmentation of the alveolar ridge was attained after 4 months. Thus, the clinician should consider the pros and cons of this regenerative approach along with other more conservative treatment alternatives when negotiating similar cases.

(*BONDBONE®, MIS Implants Technologies Ltd.)