

98.29%

- **98.29% : Success Rate using MegaGen Rescue implants as an alternative choice to bone augmentation procedures. 1-4 years follow-up in 117 cases.**

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Introduction

Implant placement often becomes a very difficult task, due to lack of bone in height and width respectively. Regionally this occurs more at the posterior maxilla and mandible too (1). In order to achieve successful osseointegration, various techniques have been introduced. More specifically sinus elevation (open and close technique), vertical augmentation, distraction osteogenesis and lateral transposition of the inferior alveolar nerve. Nevertheless these techniques for various reasons, many times are not applicable or successful (2). Short implants are defined the fixtures with equal or less of 8 mm (3). Recently the first results have been brought up to surface regarding the survival rates and the performance of them. This study presents 1-4 year results of a private clinic in Larissa, Greece.

Methods and Material

One hundred and seventeen fixtures (Rescue® MegaGen Co. Ltd, 377-2, Kyochon-Ri, Jain-Myun, Gyeongsan, Gyeongbuk, Korea) with a length between 5.0 to 8.0 mm, and a diameter of 6.0 to 8.0 were placed from 2007-2010 (4). Ninety nine patients (46 males, 53 females aged between 26-67 years of age with average age of 52.7 years were treated) participated in this private survey. From the 117 implants, ninety were placed in maxilla and the rest twenty seven were placed in mandible; 55 of these were restored with single crowns and 62 served as abutments of fixed partial dentures. Osseo integration period was standardized as 6 months for the upper arch and 3 for the lower arch. Regarding the restoration, all implants were restored using the same laboratory and technician. The superstructure design of choice was cemented porcelain fused to metal crown.



Results

From the ninety-two fixtures only two were not successfully integrated indicating a success rate of 98.29%. The later were replaced with other ones 5 months after the removal.

ARCH/sex	Male	Female	SUM
MAX	43	47	90
MAND	10	17	27
TOTAL	53	61	117

Conclusions

Short implants appear as an alternative to augmentation techniques. Their advantages are: decreased cost, decreased operation time, no sophisticated surgical interventions and less complications. Their increased diameter results in an improved emergence profile which is a typical issue with standard diameter fixtures when used at a molar location. Last the increased diameter outreaches the difference in length because of the increased osseointegration surface. Short implants are a valid treatment particularly in compromised cases where an augmentative technique cannot be used, in order to have a longer implant placed. This study indicated some results as trends for the value of short implants. More studies are necessary in order these trends to become solid.

References

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