Clinical Application and Short-Term Outcome Analysis of the STERI-OSS Tissue Level Extra Short Implant



STERI-OSS IMPLANT



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Introduction of the Key Doctor for Steri-oss Implant

- Representative Director of Seoul Dental Clinic
- Adjunct Professor, College of Dentistry, Seoul National University
- Adjunct Professor, Sanggye Paik Hospital Seoul, Inje University
- Adjunct Professor, Nowon Eulji Hospital Seoul, Eulji University
- Chairman & Advisor of F&I Implant Research
- Director of Osstem Master Advanced Course
- Director of Dentium GBR & Sinus Course
- Director of Megagen Advanced Course
- Director of Cowellmedi BMP Course
- Director of Neobiotech Sinus Course
- Director of Purgo GBR Course



Abstract

This clinical report presents a retrospective analysis cases in which the STERI-OSS Tissue Level Extra Short Implant was placed and restored over the course of one year (2022–2023).

The STERI-OSS Tissue Level Extra Short Implant demonstrated excellent primary stability and high ISQ values, yielding clinical success comparable to that of conventional-length implants.

In addition, this paper reviews recent literature on implants shorter than 6 mm, focusing on biomechanical considerations, survival rates, and the advantages of the tissue-level design in reducing vertical lever effects.

#Steri-oss Implant #Tissue Level #Extra Short Implant #Clinical Crown Height #Screw Loosening #Vertical Lever #ISQ

Introduction

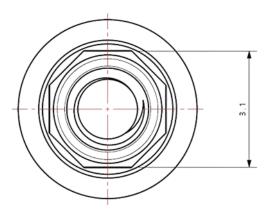
The STERI-OSS Bone Level Implant has long been recognized for its consistent stability, high ISQ values, and minimal incidence of screw loosening.

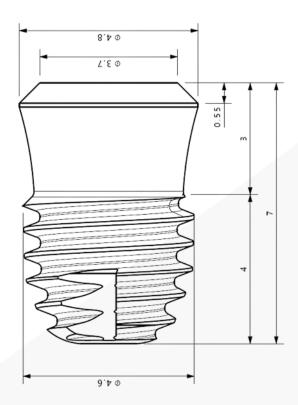
Its 11° internal connection ensures excellent compatibility with most prosthetic systems, establishing it as a reliable clinical option.

In 2022, the STERI-OSS Tissue Level Extra Short Implant was introduced to me, and approximately 50 implants were placed and restored over the following year.

Encouraged by the favorable short-term outcomes, this report was compiled together with a review of relevant literature and clinical case analyses.









Definition of Implant Dimensions

According to the 2006 European Association for Osseointegration (EAO) consensus, implants are classified as follows:

- Short implant: Intraosseous length $\leq 8 \text{ mm}$
- Extra-short implant: Length $\leq 6 \text{ mm}$
- Wide implant: Diameter $\geq 4.5 \text{ mm}$
- Narrow implant: Diameter < 3.5 mm

Implants with a length of ≤ 6 mm are classified as extra-short. STERI-OSS Tissue Level Extra Short Implants are actively manufactured and supplied in a range of diameters for the domestic market.

Clinical Reliability of Extra Short Implant

1. Literature Review

- Malo et al. (2015): Reported a 98.5% five-year survival rate for 6 mm implants placed in the posterior mandible.
- Pommer et al. (2018): A meta-analysis found no significant difference in marginal bone loss between extra-short and conventional-length implants.
- Tawil et al. (2017): Demonstrated that an ISQ value greater than 65 correlates with biomechanical stability, regardless of implant length.

2. Survival Rates & Bone Level Changes

- Calvo Guirado (2016): 60 implants with a length of 4 mm showed a 97.5% one-year survival rate.
- Slotte et al. (2012): Ø 4.1 × 4 mm SLActive implants demonstrated a two-year survival rate of 92.3% at a crown-to-implant (C/I) ratio of 2.5, with marginal bone loss of -0.43 mm at 12 months and -0.11 mm at 24 months.
- Atieh (2012): A meta-analysis of 2,573 short implants revealed a five-year cumulative survival rate of 98%.
- Srinivasan (2012): Confirmed the predictability of 6–7.5 mm implants as a treatment option.
- Clinical Report from a Global Leading Brand Straumann SLActive System: Clinical reports from global leading brands have also demonstrated the stability of extra-short implants, particularly those with a 4 mm fixture length.
- Slotte et al. (2012, CIDRR) placed 87 SLActive implants measuring \emptyset 4.1 × 4 mm in the severely resorbed posterior mandible of 24 patients. The average crown length was 9.9 mm, with a C/I ratio of 2.5. The two-year survival rate was 92.3%, and marginal bone level changes were -0.43 mm at 12 months and -0.11 mm between 12 and 24 months, indicating stable bone maintenance.
- Calvo Guirado (2016, COIR) evaluated 60 SLActive implants with a 4 mm length placed in 10 mandibular edentulous patients, splinted to 10 mm implants in a full-arch FDP. The 12-month survival rate was 97.5%, reflecting excellent outcomes.
- These global leading brand reports support the clinical stability of 4 mm extra-short implants and demonstrate that even with reduced length, they can serve as a reliable long-term treatment option.



Clinical Reliability of Extra Short Implant

3. Biomechanical Considerations

(Note: The C/I ratio refers to the height of the prosthetic crown above the gingiva divided by the length of the implant embedded in the bone.)

- Anitua (2014): Crown height space (CHS) had a greater influence on marginal bone loss (MBL) than the C/I ratio.
- Anitua (2015, CIDRR):
 - No significant correlation was found between the C/I ratio of short implants and MBL.
 - However, the use of cantilevers, which represents a challenging biomechanical condition, was associated with a marked increase in MBL.
 - MBL without cantilever: 0.31 mm
 - MBL with cantilever: 0.74 mm (approximately 2.4 times higher)
 - MBL at C/I < 2: 0.37 mm
 - MBL at $C/I \ge 2: 0.31 \text{ mm}$
 - These findings indicate that the presence of a cantilever is a more critical factor than the C/I ratio in influencing MBL changes.
- Urdaneta (2010): High C/I ratios were related to prosthetic complications but not to bone loss.
- Sun (2013): Over a six-year observation period, increased C/I ratios and crown height were linked to technical complications, but not to biological ones.
- EAO (2009): C/I ratios \leq 2 are considered clinically acceptable and may serve as a viable alternative to more invasive vertical augmentation procedures (e.g., sinus grafting, vertical bone grafting).

Rationale for Using Tissue Level Design in Extra Short Implant

1. Vertical Cantilever Management

Tissue level implants reduce the clinical crown length by increasing cuff height, which decreases vertical cantilever forces. STERI-OSS Tissue Level Extra Short Implant has a 3 mm cuff, helping to mitigate biomechanical stress during non-axial loading.

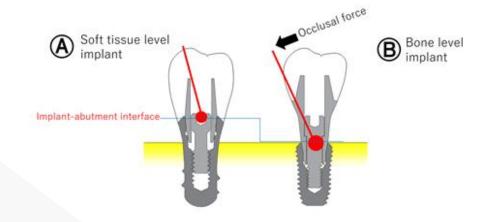
2. Prosthetic Compatibility

The second rationale for utilizing tissue-level design in extra-short implants lies in prosthetic compatibility.

Unlike bone level extra short implants, which typically require a reduction in the abutment screw length to accommodate their short body (e.g., 2 mm bevel + 4 mm thread = 6 mm total length), tissue level Implants allow for the use of conventional prosthetic components without modification. This is largely due to the relatively shorter abutment screws used in tissue level designs.

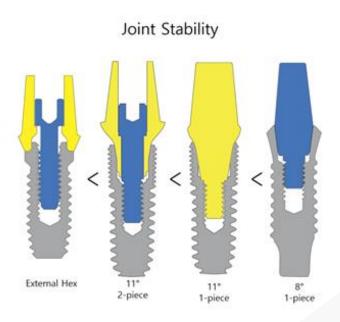
In this regard, STERI-OSS Tissue Level Extra Short Implant offers enhanced versatility. For instance, it is manufactured in dimensions as small as 3 mm in length and 5 mm in diameter dimensions that would be difficult to implement in bone level designs while maintaining mechanical integrity and prosthetic compatibility.

Effects of connection designs





Rationale for Using Tissue Level Design in Extra Short Implant



3. Implant Diameter Flexibility

The third rationale for employing a tissue level design, based on clinical reasoning, is its superior joint strength compared to bone level systems.

This enhanced mechanical integrity enables the use of narrower implant diameters without compromising stability. For instance, bone-level extra-short implants with an 11° internal connection are typically only available in diameters of 5.0 mm or greater in the domestic market.

In contrast, tissue-level extra-short implants are available starting from a 4.0 mm diameter, offering greater versatility in anatomically constrained cases.

Materials and Methods

From 2022 to 2023, 50 implants of STERI-OSS Tissue Level Extra Short were placed in posterior regions. Both single and splinted restorations were included. Initial ISQ values and follow-up results indicated strong primary stability and high patient satisfaction.



Results

- No early failures observed.
- No screw loosening in single restorations.
- Excellent soft tissue adaptation.
- No radiographic evidence of marginal bone loss.





Discussion

Extra short implants were once considered unreliable; however, recent evidence and clinical experience have demonstrated their predictability in cases with limited bone height.

Emerging consensus suggests that implant success is more dependent on primary stability, CHS, and prosthetic design than on length alone.

Key advantages of the STERI-OSS Tissue Level Extra Short Implant include:

- 3 mm cuff to reduce vertical leverage
- Full compatibility with standard prosthetic components
- Mechanical stability even at Ø 4.0 mm diameter
- Versatile dimensions including 3 mm length and Ø 5.0 mm diameter

These features are particularly beneficial in single restorations and atrophic posterior regions.

Conclusion

STERI-OSS Tissue Level Extra Short Implant demonstrated stable and satisfactory short-term clinical outcomes, offering a safe and practical solution with biomechanical advantages and prosthetic compatibility.

While there is a prevailing perception that longer fixtures are inherently more stable, recent studies and the present clinical results indicate that short implants can achieve equally reliable stability.

In particular, 4 mm extra-short implants have been shown in multiple reports to deliver predictable and successful outcomes.

Therefore, rather than resorting to aggressive bone grafting, the use of the STERI-OSS Extra Short Implant yielded results that were satisfactory for both patients and clinicians, confirming its potential as an excellent alternative in cases with limited vertical bone height.

References

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- European Association for Osseointegration. (2006). Consensus Report: Definitions of implant dimensions. EAO Consensus Conference.

Efficacy and Predictability of Short Dental Implants (< 8 mm): A Critical Appraisal of the Recent Literature

Murali Srinivasan, BDS, MDS, MBA1/Lydia Vazquez, MD, DMD2/Philippe Rieder, DMD3/ Osvaldo Moraguez, DMD3/Jean-Pierre Bernard, MD, DMD, Prof Dr med den Urs C. Belser, DMD, Prof Dr med dent⁵

Purpose: This review of literature was conducted to evaluate the predictability of treatn jaws, (2) had a minimum of 20 SDI in their analysis, (3) provided data on survival rat a minimum observation period of at least 3 months after placement. Results: Fortythe above criteria; only 17 of these studies reported outcomes with microrough surfalengths (4, 5, 6, 6.5, 7 and 7.5 mm) of microrough surface SDI with varying diame were identified in the studies. A total of 1,828 mid reported. Observation periods ranged from 3 months to 9 years. The reported s from 92.2% to 100%. From a total of 1.123 SDI inserted in specified law locations, fail not identify any correlation between implant diameter and survival for the microrough w segments. INT J ORAL MAXILLOFAC IMPLANTS 2012;27:1429-1437

Key words: dental implant, implant length (< 8 mm), literature review, short dental

The Effect of Increased Crown-to-Implant Ratio on Single-Tooth Locking-Taper Implants

Rainier A. Urdaneta, DMD, CAGS¹/Sujey Rodriguez, DDS, MS²/D. Cary McNeil, D^{**} Meghan Weed, RDH⁴/Sung-Kiang Chuang, DMD, MD, DMSc⁵

Purpose: It has been proposed that increased crown heights lead to greater crestal stres implants, crestal bone loss, and other complications. The purpose of this study was to effect of increased crown-to-implant ratio (C/IR) on single-tooth implants. Materials and retrospective cohort study was conducted between July 2001 and August 2003. The coh posed of patients who had at least one single-tooth Blcon implant restored with a cemen tion and attended recall examinations in 2004, 2005, and 2007, during which severa radiographic variables were documented. Descriptive statistics and univariate and multiv effects regression models, adjusted for multiple implants in the same patient, were used cohort was composed of R1 subjects who received 326 Ricon implants. The mean duratio was 70.7 months. Mean change in the mesiodistal crestal bone levels was -0.33 mm. The was 1.6 (range, 0.79 to 4.95). Forty implant restorations (16%) had a C/IR ≥ 2. Implan with increased C/IR were significantly more likely to have increased mesiodistal crown implant diameter, larger distance to mesial and distal adjacent structures, and deeper ings. Increased C/IR had a statistically significant effect in the loosening of maxillar abutment posts used to restore posterior areas. A C/IR up to 4.95 did not lead to an inc e levels on single-tooth locking-taper implants. INT J ORAL MAXILE

Four-Millimeter Implants Supporting Fixed Partial Dental Prostheses in the Severely Resorbed Posterior Mandible: Two-Year Results

Christer Slotte, DDS, PhD:* Arne Grønningsaeter, DDS: Anne-Marie Halmay, DDS: Lars-Olof Öhrnell, DDS-F Göran Strob, DDS-F Sten Isaksson, DDS, PhD:** Lars-Åke Johansson, DDS-F Arne Mordenfeld, DDS;11 Jan Eklund, DDS;85 Jan Embring, DDS*5

Background: Reduced alveolar bone volume complicates implant dentistr

fixed dental prosthesis (FDP) in the severely resorbed posterior mandible was evaluated for two years.

Material and Methods: Thirty-two patients (11 men, 21 women; mean age 64.1 years) participated. Ten to 12 weeks after single-stage surgery, a screw-retained FDP was attached to three or four 4-mm implants. Results and Discussion: One hundred implants were inserted. Three failed at surgery and four w

Twenty-eight patients received FDPs (\$3 implants). Two patients were discontinued because of secondary exclusion criteria therefore, 26 patients were followed up from baseline (BL). After 1 year, one patient insisted on removal of all implants and one patient died because of nonstudy-related complications. Twenty-four patients (87 implants) were eigible for exam-nation 2 years post-loading. All implants were found to be stable [survival rate 95.7% (confidence interval, CI 88.8–98.3 p < .001) and from 12 to 24 months = 0.11 mm (Cl =0.01=0.25; p = .056). The survival rate is only slightly lower than is similar studies on 6 to 8.5 mm implants. This may be related to high initial stability and effective use of the residual bone. volume with high primary bone-to-implant contact in dense bone structures. The surgical handling of the tested implan was found to be similar to that of implants of common length. However, the preparation procedure must be done with grecare to avoid overdrilling. Careful planning and design of the prosthetic construction is mandatory to prevent unfavorable occlusion and avoid harmful shear forces.

Conclusion: This study showed that 4 mm in

2 years and with healthy peri-implant condition

KEY WORDS: bone loss, crown-implant ratio, jaw bone atrophy, short implants

Biomechanics/risk management (Working Group 2)

Members of Working Group Phoebus Madianos Carlos Madrid Pascal Marquart Victor Palarie Alberto Sicilia Jose Zurdo

Key words: anticoagulants, bisphosphonates, cantilevers, crown-implant ratio, guide

ons that may affect the outcome of implant therapy. sions of the review process are presented in the followin papers, together with the group consensus statements, clinical implications and direction

implant decays. For this purpose the lit-crature was systematically searched and critically reviewed. Five manuscripts were produced in five specific topics identified

are patients J. Zurdo, C. Romao To what carent does the grown-im Retrospective Study of Short and Extra-Short Implants Placed in Posterior Regions: Influence of Crown-to-Implant Ratio on Marginal Bone Loss

Eduardo Anitua, MD, DDS, PhD;*. Laura Piñas, Degree of Dentistry;* Gorka Orive, PhD

and biomechanical variables on marginal bone loss (MBL) and on the survival rates of implant-supported prostheses in short implants (\$8.5 mm in length) placed in posterior areas of maxilla and mandible.

Material & Methods: This was a retrospective study based on clinical charts and follow-up recordings from a single private ractice over a period of 10 years. Patients rehabilitated in the posterior region of the jaws by means of p other prosthetic and biomechanical variables, were registered. The data were split into two groups according to the value of CI ratio (CI < 2 and CI ≥ 2). MBL was measured from radiographs using an image analysis software. Implant and

Results: One hundred twenty-eight short implants placed in 63 patients were evaluated. The mean follow-up period was 21.88 months (standard deviation (SD): 22.9, range 7-113 months). Eighty-six implants (67.2%) had a Cl ratio of <2, whereas it was >2 in 42 implants (32.8%). The mean value of CI ratio was 1.82 (SD: 0.42; range 1.04-3.31). The average MBL after 1 year of follow-up was 0.35 (SD: 0.65), and it was 0.45 (SD: 0.46) mm for subsequent evaluation. Survival rates of implants and prosthesis were 100%. The presence of a cantilever had a negative influence on the first year MBL (p < .05) Conclusions: The CI ratio had not a significant influence on MBL in Biotechnology Institute (BTI; Vitoria, Spain) short implants humidified with PRGF-Endoret and placed in posterior areas. The only variable that showed a significant negative influence on first year postloading MBL was the use of cantilever for rehabilitations.

KEY WORDS; extra-short implants, implant survival, marginal bone loss, retrospective, short implants

In the pioneering era of oral implantology, it was thought that the rationale for using implant-supported restorations and determining the optimal prosthetic crown/implant ratio had to be based in the hypothesis of considering the implant as a tooth root, However, as the field advanced, it was observed that these initial guide-

*Private practice, Implantology and Oral Rehabilitation, Vitoria, Spain; *Biotechnology Institute (BTI), Vitoria, Spain Reprint requests: Dr. Eduardo Anitua, Biotechnology Institute, Insti-© 2013 Wiley Periodicals, Inc.

in the case of teeth, the periodontal ligament essentially attaches the tooth to the surrounding alveolar bone whereas in the case of dental implants, a stable and long-term connection depends mainly on implant gration, which is an intimate contact between alveolar bone and implant surface, without interposi tion of fibrous tissue around the implants. In addition until recently, clinicians used to place the longest possible implants in any given site with the aim of increaing the surface available for osseointegration and, a the same time, maintaining a crown/implant ratio that mimics as much as possible the natural tooth/root ratio In natients with reduced alwedar hone height the insertion of standard length implants is often

CLINICAL ORAL IMPLANTS RESEARCH

José Luis Calvo-Guirado José Alberto López Torres Michel Dard Fawad Javed Carlos Pérez-Albacete José Eduardo Maté Sánchez

Case Report Evaluation of extrashort 4-mm implants in mandibular edentulous patients with reduced bone height in comparison with standard implants: a 12-month results

The office of the control of the con

Effect of Crown to Implant Ratio and Anatomical Crown Length on Clinical Conditions in a Single Implant: A Retrospective Cohort Study

Shan-Pao Sun, MS;* Ik-Sang Moon, PhD;' Kwang-Ho Park, MS;1 Dong-Won Lee, PhD

distribution and Methods: Seventy-six subjects were selected from patients who had been treated with single Astra implants for replacement of missing premolers and molers. The peri-implant marginal bone level change was assessed 1 year after uncircular loading and 6 years after financianal loading, for prefix the peri-implant marginal bone level change using linical and radingsuphic data, a multiple linear regression model was applied. The Wilcomer rank sum test was used to

Results: The CTI nets and elatomical covern angith verie rule anodated with perturbation published arguments one or causing in the bone level of a typicar ($\rho = 0.3$), However, the modified plaque index, modified unless bleeding index, and smoking status influenced the perturbation angitude benefits produced association status influenced the perturbation amongstude bone loss ($\rho < 0.0$, r = 0.34). In addition, the patient with technical complication growed dis bone significantly increased amontestical covern length ($\rho < 0.05$).

Generalissisms: The higher C/I ratio and anatomical crown length did not increase the risk of peri-implant margin during 6 years of functional loading. In addition, higher anatomical crown lengths are associated with higher

INTRODUCTION

Tooth extraction may lead to a reduced vertical bone height, resulting in an unfavorable jaw relationship degree of nonaxial loading of an implant-supported prosthesis amplify the risk of excessive occlusal overload overload overload. by increasing the moment arm.

clinical reports disagree with these observations,7 Dis

studies may be attributed to the continuous bone remodeling that occurs around dental fixtures.* In light of the aforementioned studies, clinicians tend to insert the longest implants possible, presuming that a higher access rate is possible with the use of a lower crown-to

Implant Survival and Crestal Bone Loss Around **Extra-Short Implants Supporting a Fixed Denture:** The Effect of Crown Height Space, Crown-to-Implant Ratio, and Offset Placement of the Prosthesis

Eduardo Anitus, MD, DDS, PhD1/Mohammad Hamdan Alkhraist, DDS, PhD2/ Laura Piñas, DDS³/Leire Begoña, MSc²/Gorka Orive, PhD²

Purpose: To determine the effect of crown height space, crown-to-implant ratio, and offset placement of prosthesis on implant survival, creatal bone loss, and prosthetic complications; and to determine whether al values for crown height space and crown-to-implant ratio exist for imple sandible and followed for at least 12 months were analyzed. Radlographic and clinical exam ne, crown height space, crown-to-implant ratio, offset placement of the prosthesis, crestal bone los implant failure. **Results:** Thirty-four patients (mean age, 60 ± 10 years) with 45 extra-short in cipated in this study. Patients were followed for up to 4 years (mean, 2 years) and no implants we as 2.4 (range, 1.5 to 3.69). Mean ne (mean, 1.28 ± 1.09 mm) and was (pr

Key words: biomechanics, bone loss, crown height space, crown-to-implant ratio, short implants

The periodontal ligament, whose principal function which may lead to bone resorption and implant loss to retain a tooth in the alveolar socket, gives the Moreover, they will increase the risk of prosthetic com-It is to retain a tooth in the anventor socket, gives the natural dentition a larger range of physiologic mobility than an ossecintegrated dental implant. If a force of 0.1 N is applied to a tooth with a healthy periodontal ligament, the range of mobility is between 50 and 200 µm, whereas the application of the same force to a dental implant will result in mobility of 10 µm.³⁻² The greater rigidity of a dental implant makes it more vulnerable to

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bone loss and the placement of a long crown.7 Mor

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Clinical Cases Presentaion

A selection of 10 clinical case examples are included to support the above.



• Gender: Female

• Age: 85

• PMHx: None Significant (N/S)

CASE SUMMARY

• The patient underwent removal of an existing implantsupported bridge in the lower left quadrant, followed by bone grafting with a titanium mesh.

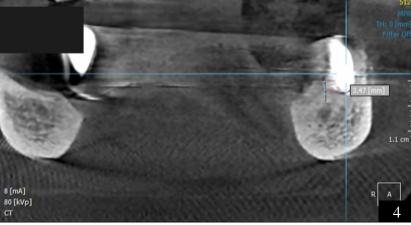
TREATMENT PLAN

- Placement of STERI-OSS Tissue Level Extra Short Implants in positions #34, 36, and 37.
- Fabrication of a 4-unit bridge

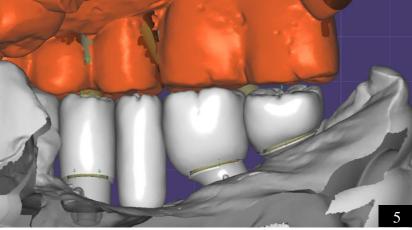
OUTCOME

- Implants were successfully placed without injury to the inferior alveolar nerve.
- Impression was taken and the prosthesis fabricated, but the final delivery photograph was unavailable due to the patient's absence.





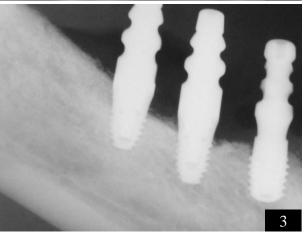
















• Gender: Male

• Age: 56

• PMHx: None Significant (N/S)

CASE SUMMARY

- The patient had previously undergone implant placement in the lower right quadrant, but the implant was removed due to persistent numbness and other issues.
- As a result, the patient developed dental phobia and did not receive prosthetic treatment for the remaining edentulous areas.

TREATMENT PLAN

- Placement of multiple STERI-OSS Bone Level and Tissue Level Extra Short Implants in the lower right quadrant
- Placement of appropriate implants in the remaining areas, followed by second-stage surgery on existing implants and prosthetic restoration

OUTCOME

• A stable occlusal relationship was achieved with the completed prosthesis, without any postoperative complications.



• Gender: Female

• Age: 72

• PMHx: None significant (N/S)

CASE SUMMARY

• Long-standing tooth loss in the lower left quadrant.

TREATMENT PLAN

• Placement of STERI-OSS Tissue Level Extra Short implants in positions #36 and #37 to fabricate a prosthesis.

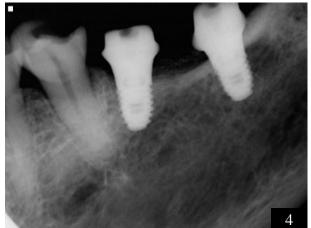
OUTCOME

• Due to significant pain during drilling, SteriOss Tissue Level Short Implants were placed, and a prosthesis expected to provide long-term functional stability was completed.

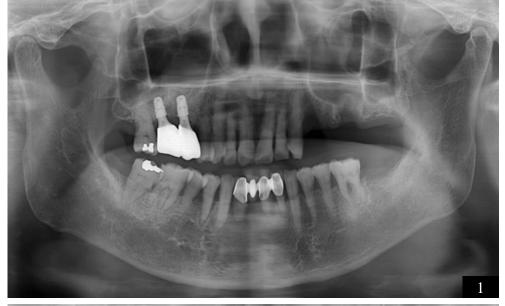


















Gender: Female

• Age: 64

• PMHx: None significant (N/S)

CASE SUMMARY

• Severe chronic periodontitis with high mobility affecting #34 and #37, requiring extraction.

TREATMENT PLAN

• Immediate placement of STERI-OSS Bone Level and Tissue Level Extra Short Implants after extraction.

OUTCOME

• The prosthesis was completed with excellent functional results; however, no final photograph was available due to the patient's absence.

• Gender: Female

• Age: 68

• PMHx: None significant (N/S)

CASE SUMMARY

• Complete loss of mandibular molars.

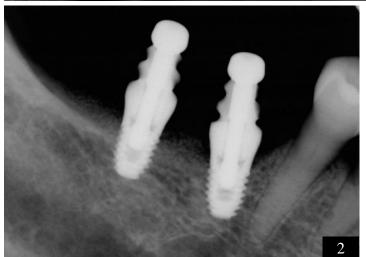
TREATMENT PLAN

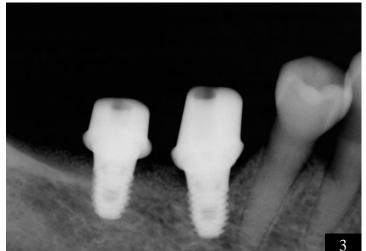
• Place two STERI-OSS Tissue Level Extra Short Implants in the vertically resorbed lower right area for restoration.

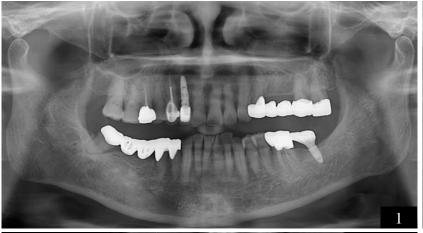
OUTCOME

• Prosthesis completed on the right side; patient did not return for left-side treatment, so no final photo available.

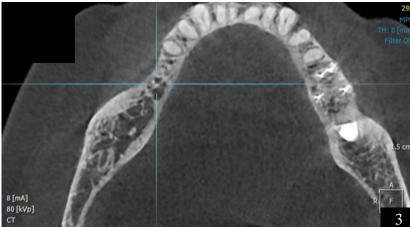
















Gender: Female

• Age: 64

• PMHx: None significant (N/S)

CASE SUMMARY

• Bridge failure in lower right quadrant.

TREATMENT PLAN

• Section bridge distal to #45, recontour the over-bulged pontic area, and place STERI-OSS Tissue Level Extra Short Implant.

OUTCOME

• No complications post-placement, but no final prosthesis photo due to lack of patient follow-up.

• Gender: Male

• Age: 69

• PMHx: None significant (N/S)

CASE SUMMARY

• Reconstruction of missing #46 and #47. #47 close to the inferior alveolar nerve.

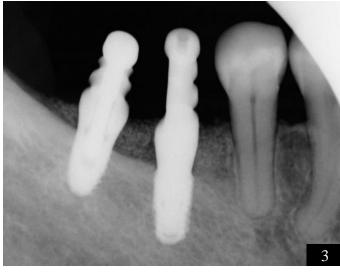
TREATMENT PLAN

- Placement of STERI-OSS Tissue Level Extra Short Implant at #47.
- Place Bone Level Implant at #46 and fabricate 2-unit bridge.

OUTCOME

• Restoration completed without issues; final photo unavailable due to missed follow-up.

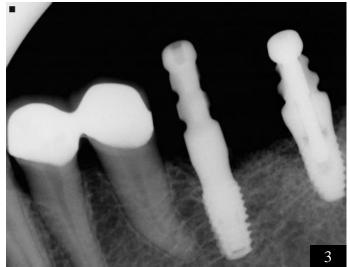




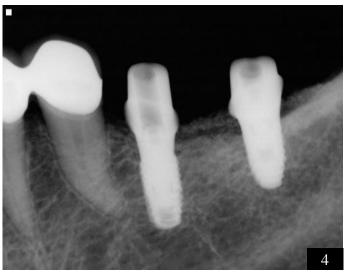












• Gender: Female

• Age: 75

• PMHx: Chronic periodontitis

CASE SUMMARY

 The patient presented with failure of existing implant prostheses and multiple missing teeth. In the mandible, several teeth were absent, and the remaining teeth had poor prosthetic conditions, necessitating comprehensive oral rehabilitation.

TREATMENT PLAN

- Maxilla: Performed bone grafting in areas of severe bone loss, followed by simultaneous implant placement and prosthetic restoration.
- Mandible: Due to insufficient bone height, a combination of STERI-OSS Bone Level implants and Tissue Level Extra Short Implants was placed, selecting the optimal surgical approach.

OUTCOME

• Restoration completed without any complications, but no final prosthetic photo due to lack of patient's follow up.

• Gender: Female

• Age: 58

• PMHx: Chronic periodontitis

CASE SUMMARY

• The patient presented with multiple failed implants in the maxilla and multiple missing teeth in the mandible due to chronic periodontitis.

TREATMENT PLAN

- Mandible: Plan to place STERI-OSS Bone Level and Tissue Level Extra Short Implants and deliver an early-loading temporary bridge within one month.
- Maxilla: Remove hopeless implants, perform bone graft and sinus graft, and place several implants. After approximately four months, place additional implants, and two months later, deliver a temporary bridge using implants with good ISQ values. The patient will then be referred back to the requesting dental clinic.

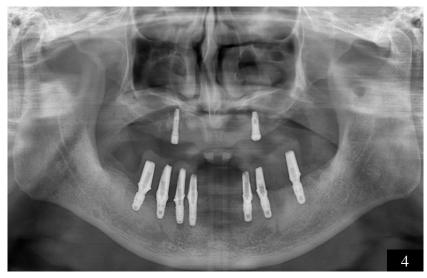
OUTCOME

• Immediately after surgery, the implants demonstrated excellent primary stability and high ISQ values, confirming their reliability. The patient regained normal masticatory function earlier than expected, and the chewing ability was evaluated as highly favorable.

















• Gender: Female

• Age:78

• PMHx: Chronic periodontitis

CASE SUMMARY

• The patient experienced discomfort with the existing denture and requested implant treatment.

TREATMENT PLAN

- Mandible: Place multiple implants in the edentulous areas for fixed restoration. At site #36, plan the use of a STERI-OSS Tissue Level Extra Short Implant to maintain a 2 mm safety distance from the inferior alveolar nerve.
- Maxilla: Place two bone level implants for a magnet overdenture.

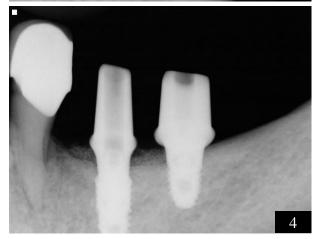
OUTCOME

• A prosthesis with a proper occlusal plane was completed in the mandible, while treatment for the maxilla is still in progress.











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