

Surgical and Partial Extractions of Erupted Teeth and Removal of Retained Roots

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[➔ Instructions for Use](#)

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Related Dental Policy

- [Surgical Extraction of Impacted Teeth](#)
- [Dental Implant Placement and Treatment of Peri-Implant Defects/Disease](#)

Coverage Rationale

Surgical Extraction of an Erupted Tooth

[Surgical Extraction of an Erupted Tooth](#) is indicated for any of the following:

- The fracture of a tooth or roots during a non-surgical extraction procedure
- Erupted teeth with unusual root morphology (dilacerations, cementosis)
- Erupted teeth with developmental abnormalities that would make non-surgical extraction unsafe or cause harm
- When fused to an adjacent tooth
- In the presence of periapical lesions
- For maxillary posterior teeth whose roots extend into the maxillary sinus
- When tooth has been crowned or been treated endodontically

Surgical Removal of Residual Tooth Roots

[Surgical Removal of Residual Tooth Roots](#) is indicated when tooth roots or fragments of tooth roots remain in the bone following a previous incomplete tooth extraction.

Partial Extraction for Immediate Implant Placement (i.e., Socket Shield Technique)

[Partial Extraction for Immediate Implant Placement](#) is not indicated due to insufficient evidence of efficacy.

Definitions

Partial Extraction for Immediate Implant Placement: A technique in which the buccal two-thirds of the root in the socket is preserved vertically. (Kumar, 2018)

Surgical Extraction of an Erupted Tooth: A tooth requiring removal of bone and/or sectioning of tooth, including elevation of mucoperiosteal flap if indicated. Includes related cutting of gingiva and bone, removal of tooth structure, minor smoothing of socket bone and closure. (ADA)

Surgical Removal of Residual Tooth Roots: The Surgical Removal of Residual Tooth Roots (cutting procedure) includes cutting of soft tissue and bone, removal of tooth structure and closure. (ADA)

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CDT Code	Description
D7210	Extraction, erupted tooth requiring removal of bone and/or sectioning of tooth, and including elevation of mucoperiosteal flap if indicated
D7250	Removal of residual tooth roots (cutting procedure)
D7252	Partial extraction for immediate implant placement
D7922	Placement of intra-socket biological dressing to aid in hemostasis or clot stabilization, per site

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Description of Services

Surgical extraction is the removal of a tooth that presents clinically with a condition that does not safely or adequately allow access using a non-surgical approach. Surgical extractions require an incision, elevation, and bone removal. It may be an entire tooth, or any part of a tooth, including retained roots.

The Socket Shield technique, also known as partial extraction therapy, root membrane technique, and partial root retention, was introduced in 2010 and is technique in which the buccal two-thirds of the root in the socket is preserved vertically allowing the periodontium, bundle bone, and the buccal bone to remain intact. This is thought to improve the esthetics and contouring of implant rehabilitation by way of preventing the loss of the aforementioned structures (Kumar, 2018).

Pursuant to CA AB2585: While not common in dentistry, nonpharmacological pain management strategies should be encouraged if appropriate.

Clinical Evidence

In a 2023 systematic review, Oliva et al. evaluated the efficacy of the socket shield technique (SST) for reducing buccal bone resorption. Seventeen articles (randomized controlled clinical studies, prospective cohort studies, and retrospective case series) comprised of 656 implants placed using the SST compared with standard placement techniques were included. The mean follow up was 18 months. Outcomes assessed included the implant survival rate with SST, type and frequency of complications, and the long-term prognosis for the stabilization of buccal soft and hard tissues. The results showed that implant survival rate was 98.6% which is in line with standard implant placement techniques. Seventy-six percent of implant failures could be attributed to internal or external exposure due to surgical technique or infection. Marginal bone loss (MBL) was less and pink esthetic score (PES) higher in implants placed using SST. Two randomized controlled trials showed significantly less horizontal bone loss for implants placed with SST. The authors concluded that the results are encouraging, and further long term research is needed to establish clinical efficacy and safety before the SST can be recommend for routine clinical implementation.

Ogawa et al. (2022) performed a systematic review on the effectiveness of the SST in dental implant placement. Twenty studies were included, (one randomized controlled trial, two cohort studies, 14 clinical human case reports, and three retrospective case series) comprised of 274 patients that were treated with the SST and immediate implant placement. The implant placement in the majority of the included studies were placed in the maxillary anterior region, but there were other areas as well. Follow up ranged from 3- 60 months. The results showed that the treatment was successful in 248 of the implants placed, without complications or adverse events during follow up time reported. Complications and adverse events rate was 9.5% and included internal and external shield exposure, failure of osseointegration, shield mobility and infection. The authors concluded that the SST for implant placement is effective in preserving bone with a good esthetic outcome and low complication rates. This review is limited by the majority of studies being case series and only one randomized controlled trial and all but one had follow up of less than a year. Further high quality research with large patient populations and longer follow up are required.

Tiwari et al. (2020) conducted a study to compare the efficacy of immediate implant placement after extraction without socket-shield technique and with socket-shield technique in the esthetic region. Sixteen patients with unsalvageable maxillary anterior teeth with labial bone thickness of less than 2 mm as shown on preoperative cone beam computed tomography (CBCT) were chosen for the study and randomly assigned one of two groups. Group A patients has implant placement using the SST, and Group B patients had immediate implant placement without SST. The labial bone thickness was analyzed along its entire length through CBCT scan at follow-up intervals of 1, 4, 8 and 12 month. The results showed there was consistent stabilization of bone loss in Group A throughout the 12 month follow up period, and Group B showed stabilization until month 8, when it showed progression. that was not statistically significant. The authors concluded that further research is needed to demonstrate the efficacy of the SST.

References

American Dental Association (ADA), CDT Code Book, 2025.

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Ogawa T, Sitalaksmi RM, Miyashita M, et al. Effectiveness of the socket shield technique in dental implant: A systematic review. *J Prosthodont Res.* 2022 Jan 11;66(1):12-18.

Oliva S, Capogreco M, Murmura G, et al. The socket shield technique and its complications, implant survival rate, and clinical outcomes: a systematic review. *J Periodontal Implant Sci.* 2023 Apr;53(2):99-109.

Santhanakrishnan M, Subramanian V, Ramesh N, et al. Radiographic and esthetic evaluation following immediate implant placement with or without socket shield and delayed implant placement following socket preservation in the maxillary esthetic region - a randomized controlled clinical trial. *Clin Cosmet Investig Dent.* 2021 Nov 19;13:479-494.

Tiwari S, Bedi RS, Wadhvani P, et al. Comparison of immediate implant placement following extraction with and without socket-shield technique in esthetic region. *J Maxillofac Oral Surg.* 2020 Dec;19(4):552-560.

Guideline History/Revision Information

Date	Summary of Changes
01/01/2025	<p>Title Change</p> <ul style="list-style-type: none"> Previously titled <i>Surgical Extraction of Erupted Teeth and Retained Roots</i> <p>Related Policies</p> <ul style="list-style-type: none"> Added reference link to the Dental Policy titled <i>Dental Implant Placement and Treatment of Peri-Implant Defects/Disease</i> <p>Coverage Rationale</p> <p><i>Partial Extraction for Immediate Implant Placement (i.e., Socket Shield Technique)</i></p> <ul style="list-style-type: none"> Added language stating Partial Extraction for Immediate Implant Placement is not indicated due to insufficient evidence of efficacy <p>Definitions</p> <ul style="list-style-type: none"> Added definition of “Partial Extraction for Immediate Implant Placement” <p>Applicable Codes</p> <ul style="list-style-type: none"> Updated list of applicable CDT codes to reflect annual edits; added D7252 <p>Supporting Information</p> <ul style="list-style-type: none"> Added <i>Clinical Evidence</i> section Updated <i>Description of Services</i> and <i>References</i> sections to reflect the most current information Archived previous policy version DCG005.10

Instructions for Use

This Dental Coverage Guideline provides assistance in interpreting UnitedHealthcare standard and Medicare Advantage dental plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard dental plan. In the event of a conflict, the member specific

benefit plan document governs. Before using this guideline, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Dental Coverage Guideline is provided for informational purposes. It does not constitute medical advice.