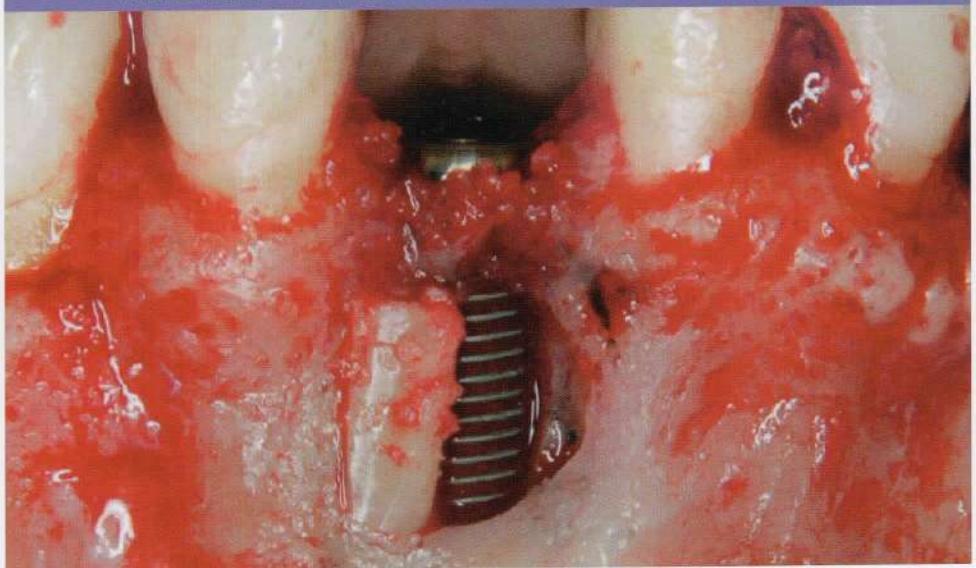


# Periimplant Regeneration

Fenestration

開窓部位に対するインプラント周囲の再生



Treatment concept of Dr. Jean-Pierre Gardella (surgeon) and Dr. Christian Richelme (prosthodontist), Marseille, France



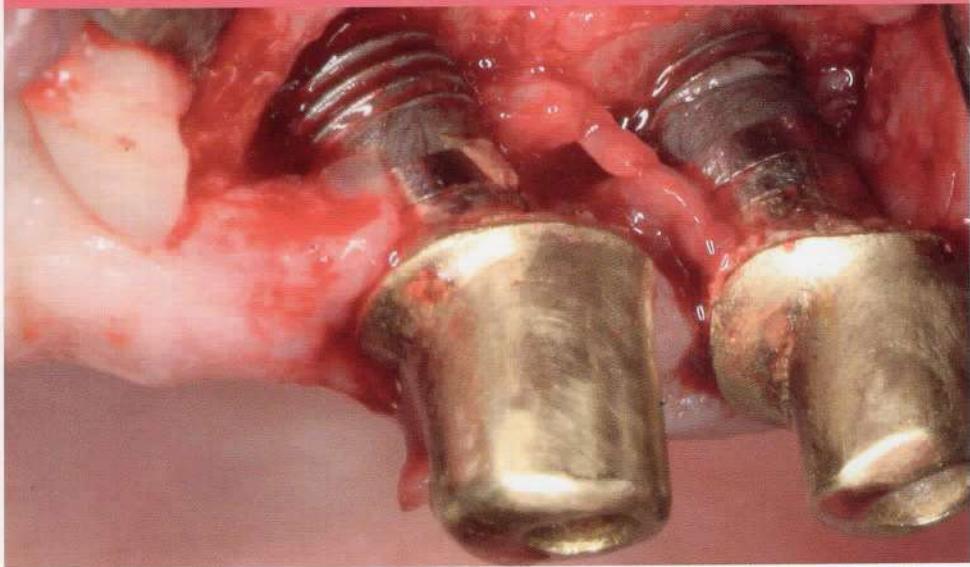
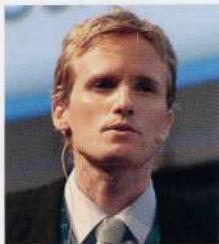
- > 大きな組織欠損を修正するために、自家骨とGeistlich Bio-Oss<sup>®</sup>を混ぜて、インプラント周囲欠損を充填すること。
- > 下顎切歯の抜歯術は上顎切歯の抜歯にも有効なテクニックである。
- > 早期インプラント埋入。

## 1. Indication profile (see Figure 1a and 1b)

Region	<input checked="" type="checkbox"/> aesthetic region <input checked="" type="checkbox"/> one missing tooth	<input type="checkbox"/> non-aesthetic region <input type="checkbox"/> several missing teeth
Bone quality	<input type="checkbox"/> absence of bone lesion <input checked="" type="checkbox"/> bone augmentation indicated	<input checked="" type="checkbox"/> bone lesion(s)
Soft tissue	<input type="checkbox"/> absence of recession <input checked="" type="checkbox"/> inflammation <input type="checkbox"/> without complications <input checked="" type="checkbox"/> soft-tissue augmentation indicated	<input checked="" type="checkbox"/> recession <input checked="" type="checkbox"/> infection <input checked="" type="checkbox"/> thin <input checked="" type="checkbox"/> lack of keratinised gingiva
Indication for bone filling	<input checked="" type="checkbox"/> yes, at the time of implant insertion <input type="checkbox"/> no	

[監修]  
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### Treatment concepts for Peri-Implantitis by PD Dr. Frank Schwarz, Dr. Narja Sahm and Prof. Dr. Juergen Becker, Duesseldorf, Germany

- › 骨内欠損と歯槽骨上欠損コンポーネントに対する治療戦術。
- › 治療のステップ：感染除去、インプラント形成、骨造成 / GBRによって良好な結果を提供することができる。
- › ガイストリッヒ・バイオオス、ガイストリッヒ・バイオガイド、ガイストリッヒ・ミューコグラフトは軟組織再生の治療コンセプトの重要な要素である。

## 1. Synopsis: Regenerative Therapy

Criteria	Regenerative Measure	Visualisation
Intrabony Component	Geistlich Bio-Oss® (0.25–1 mm) Geistlich Bio-Gide® Double Layer Technique	
Supracrestal Component (< 1 mm)	Geistlich Bio-Oss® (1–2 mm) Contour Augmentation	
Supracrestal Component (> 1 mm) Dehisced Areas	Implantoplasty	
Thin Mucosa	Geistlich Mucograft®	

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## Suppliers

- > Blades: Swann-Morton #15, Swann-Morton LTD, Sheffield, England and Micro USM 6900, Sable Industries, Vista CA, USA
- > Sutures: Gore-tex CV-6 P6K23A needle RT - 13 and CV-7 P7K13A needle RT - 11, W.L. Gore & Ass, Flagstaff AZ, USA

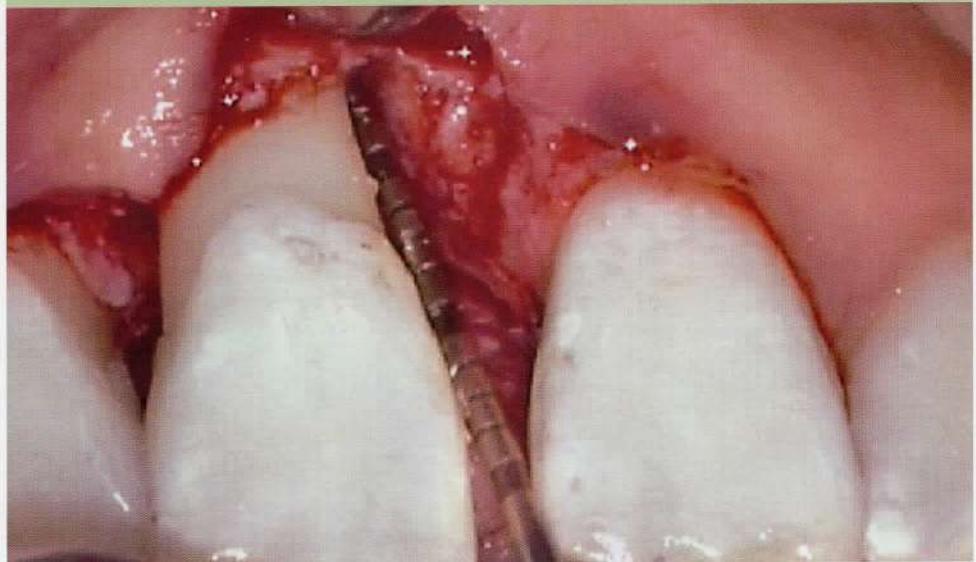
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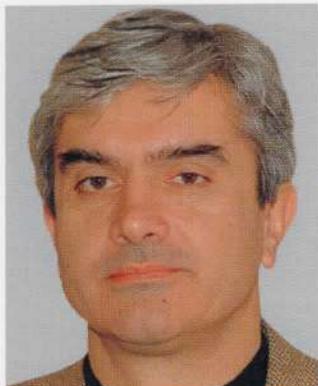
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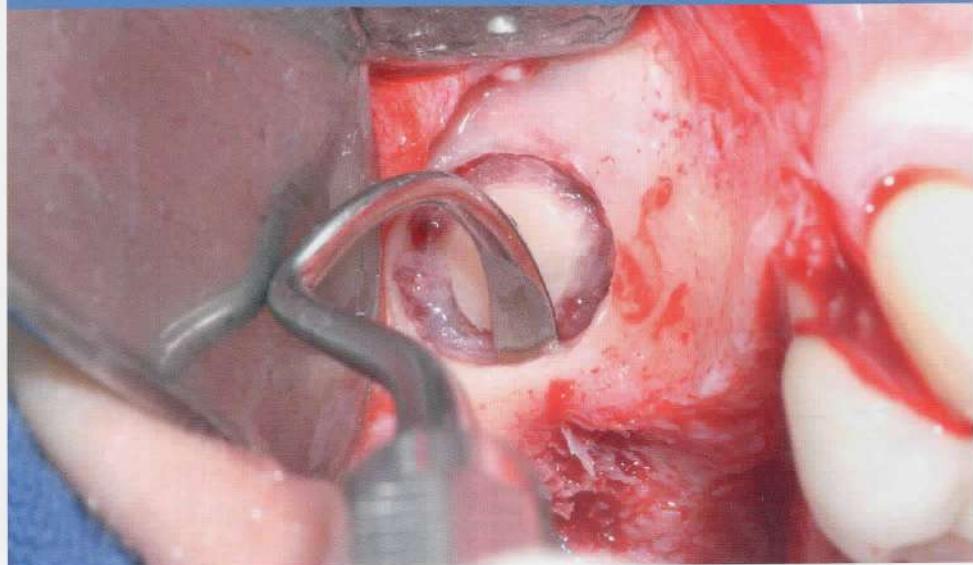
Treatment concept of Dr. Pierpaolo Cortellini, Florence, Italy



- >審美領域の歯周組織再生。
- >広汎性重度歯周炎。
- >広汎性重度歯肉炎と広範囲なプラーク残存。
- >深く(10mm)広い1壁性骨内欠損。

## 1. Indication profile

<b>Region</b>	<input checked="" type="checkbox"/> aesthetic region		<input type="checkbox"/> non-aesthetic region	
<b>Bony situation</b>	<input type="checkbox"/> single tooth gap		<input type="checkbox"/> multiple tooth gap	
	<input checked="" type="checkbox"/> bone defect present		<input type="checkbox"/> no bone defect present	
<b>Soft tissue situation</b>	<input type="checkbox"/> recession		<input checked="" type="checkbox"/> no recession	
	<input checked="" type="checkbox"/> inflamed		<input type="checkbox"/> infected	
	<input checked="" type="checkbox"/> thick biotype		<input type="checkbox"/> thin biotype	
	<input checked="" type="checkbox"/> primary wound closure possible		<input type="checkbox"/> primary wound closure not possible	
	<input checked="" type="checkbox"/> intact papillae		<input type="checkbox"/> impaired, missing papillae	
	<input checked="" type="checkbox"/> adequate keratinised mucosa		<input type="checkbox"/> inadequate keratinised mucosa	
<b>Further periodontal examination</b>	<input checked="" type="checkbox"/> full mouth plaque score: 99%		<input type="checkbox"/> uneventful	
	<input checked="" type="checkbox"/> full mouth bleeding score: 100%			



Treatment concept of Dr. Pascal Valentini,  
University of Corsica, France



>ラテラルアプローチ並びに同時・待機埋入での上顎洞挙上術。

>自家骨グラフトの回避。

>鼻中隔並びに上顎洞膜の穿孔への対処。

## 1. Indication profile

Augmentation technique depending on residual bone height

- standard implantation without augmentation > 8 mm residual bone height
- osteotome technique: not applied
- one-stage procedure > 2–3 mm bone height
- two-stage procedure < 2–3 mm bone height

Addition of autogenous bone

- yes
- no

Membrane application

- over the lateral window
- in case of perforations of the sinus membrane to cover the tears

Implant loading

- 2 months after implantation for two-stage procedure
- 4 months after augmentation and implantation
- 6 months after augmentation and implantation for one-stage procedure

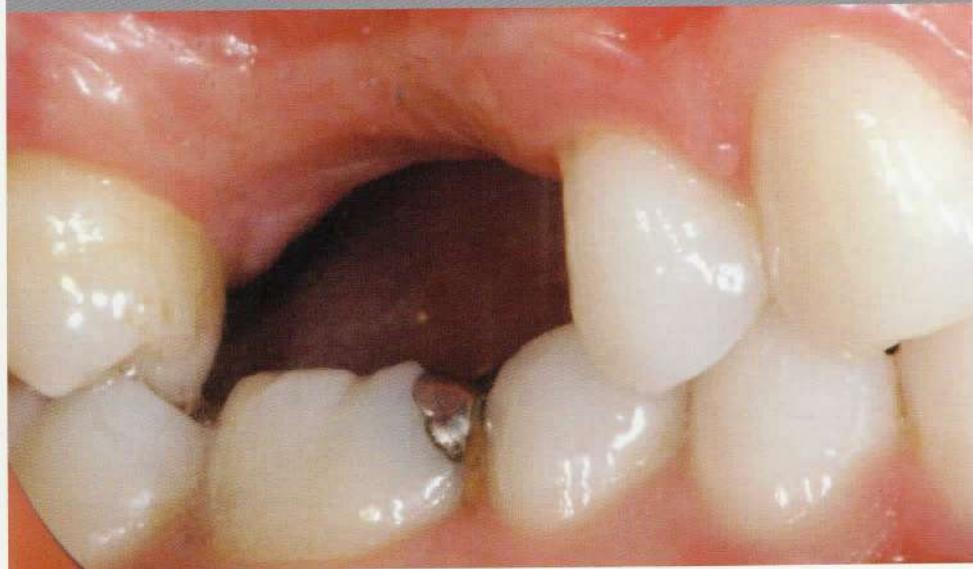
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[監修]  
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米国歯周病学会ボード認定 歯周病専門医  
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Therapy concept of Prof. Matteo Chiapasco, University of Milan, Italy



>自家骨、GeistlichBio-Oss®、GeistlichBio-Gide®を使った垂直的歯槽堤増生。

## 1. Indication profile

Region	<input checked="" type="checkbox"/> aesthetic region <input type="checkbox"/> single tooth gap	<input type="checkbox"/> non-aesthetic region <input checked="" type="checkbox"/> multiple tooth gap
Bony situation	<input checked="" type="checkbox"/> bone defect present	<input type="checkbox"/> no bone defect present
Soft tissue situation	<input type="checkbox"/> recession <input type="checkbox"/> inflamed <input type="checkbox"/> thick biotype <input checked="" type="checkbox"/> primary wound closure possible <input checked="" type="checkbox"/> intact papillae <input checked="" type="checkbox"/> adequate keratinised mucosa	<input checked="" type="checkbox"/> no recession <input type="checkbox"/> infected <input type="checkbox"/> thin biotype <input type="checkbox"/> primary wound closure not possible <input type="checkbox"/> impaired, missing papillae <input type="checkbox"/> inadequate keratinised mucosa
Implantation	<input type="checkbox"/> simultaneously with bone augmentation (1 step) <input checked="" type="checkbox"/> successively to bone augmentation (2 steps)	<input type="checkbox"/> uneventful

[監修]

築山鉄平

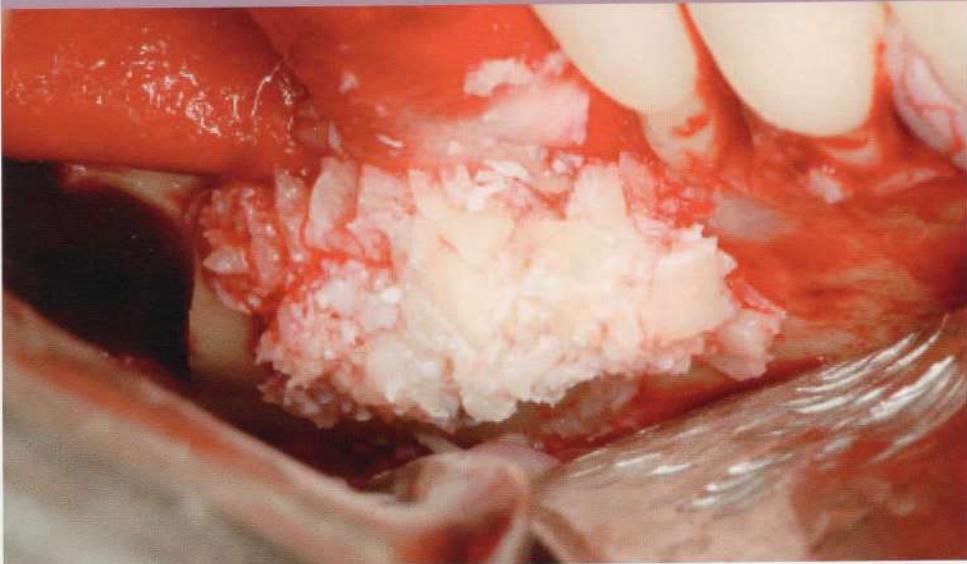
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### Treatment concept of Dr. Istvan Urban, Loma Linda University, USA



- > 吸収性メンブレン Geistlich Bio-Gide® と、自家海綿骨と Geistlich Bio-Oss® のコンビネーショングラフトを利用した水平的歯槽堤増大術。
- > ソーセージテクニックのデモンストレーションとその説明。Geistlich Bio-Oss® は骨移植材料を安定させ、また非可動性の「ソーセージの皮」のように作用する。

### 1. Indication profile

<b>Region</b>	<input type="checkbox"/> aesthetic region <input type="checkbox"/> single tooth gap <input checked="" type="checkbox"/> non-aesthetic region
<b>Bony situation</b>	<input type="checkbox"/> multiple tooth gap <input checked="" type="checkbox"/> bone defect present
<b>Soft tissue situation</b>	<input type="checkbox"/> no bone defect present <input type="checkbox"/> no recession <input type="checkbox"/> infected <input type="checkbox"/> thin biotype
	<input type="checkbox"/> primary wound closure possible <input type="checkbox"/> intact papillae <input type="checkbox"/> primary wound closure not possible <input type="checkbox"/> impaired, missing papillae
	<input type="checkbox"/> adequate keratinised mucosa <input checked="" type="checkbox"/> inadequate keratinised mucosa
<b>Implantation</b>	<input type="checkbox"/> uneventful <input type="checkbox"/> simultaneously with bone augmentation (1 step) <input checked="" type="checkbox"/> successively to bone augmentation (2 steps)

## Literature

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## Suppliers

Anti-inflammatory medication: 50 mg diclofenac, Cataflam®, Novartis Pharmaceuticals

Local anesthetic: Artican-hidrochloride with adrenaline 1/100,000

Suture material (ePTFE): GORE-TEX® CV-5 Suture, W.L. Gore & Associates, Inc.

Implant: Bränemark System®, Nobel Biocare

Fixation pins: Master-Pin System, Meisinger

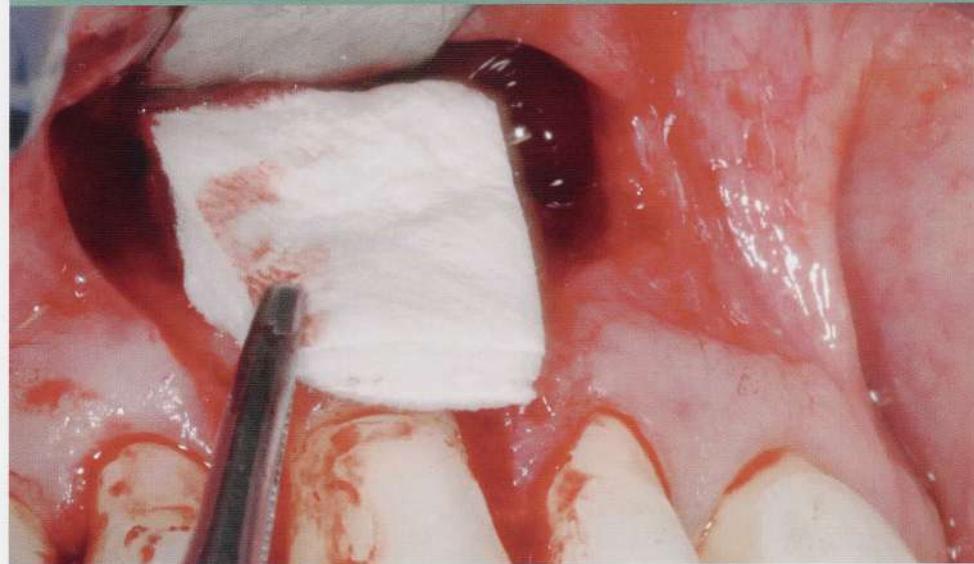
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Treatment concept by Dr. Daniele Cardaropoli,  
Private Practice, Turin, Italy



- > 齒肉退縮被覆術。
- > 齒肉バイオタイプ修正治療。
- > 齒冠部全層弁。

## 1. Indication profile

Region	<input checked="" type="checkbox"/> aesthetic region <input type="checkbox"/> single tooth gap <input checked="" type="checkbox"/> single tooth		<input type="checkbox"/> non-aesthetic region <input type="checkbox"/> multiple tooth gap	
Bony situation	<input type="checkbox"/> bone defect present		<input checked="" type="checkbox"/> no bone defect present	
Soft-tissue situation	<input checked="" type="checkbox"/> recession <input type="checkbox"/> inflamed <input type="checkbox"/> thick biotype <input checked="" type="checkbox"/> primary wound closure possible <input checked="" type="checkbox"/> intact papillae <input type="checkbox"/> adequate keratinised mucosa		<input type="checkbox"/> no recession <input type="checkbox"/> infected <input checked="" type="checkbox"/> thin biotype <input type="checkbox"/> primary wound closure not possible <input type="checkbox"/> impaired, missing papillae <input checked="" type="checkbox"/> inadequate keratinised mucosa <input type="checkbox"/> uneventful	

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## Suppliers

- > Sutures: Resopren 5/0 (Resorba, Germany) and Glycolon 5/0 (Resorba, Germany)

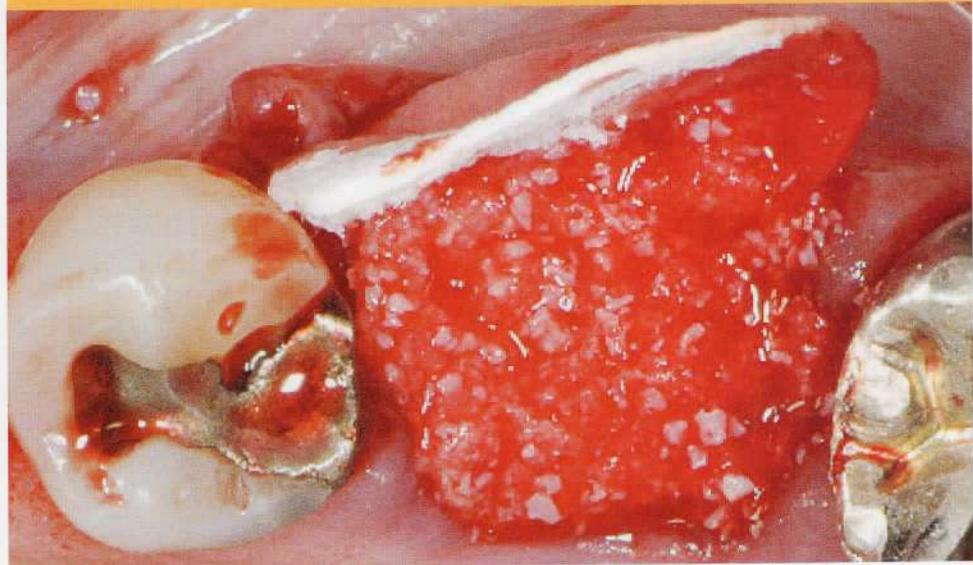
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Clinical Procedure by Assoc. Prof. Dr. Dietmar Weng,  
Private Practice, Starnberg, Germany



将来のインプラント埋入に備え、頬側骨欠損を伴う歯槽骨に対して行った抜歯後歯槽堤保存術  
(リッジプリザベーション)。

## 1. Indication profile

### Area

- |   |  |
|---|--|
| <input type="checkbox"/> aesthetic region   | <input checked="" type="checkbox"/> non-aesthetic region               |
| <input checked="" type="checkbox"/> single tooth gap                                  | <input type="checkbox"/> multiple tooth gap                            |
| <input checked="" type="checkbox"/> bone defect present                               | <input type="checkbox"/> no bone defect present                        |
| <input type="checkbox"/> recession  | <input checked="" type="checkbox"/> no recession                       |
| <input checked="" type="checkbox"/> thick biotype                                     | <input type="checkbox"/> thin biotype                                  |
| <input type="checkbox"/> primary wound closure possible                               | <input checked="" type="checkbox"/> primary wound closure not possible |
| <input checked="" type="checkbox"/> sufficient keratinised mucosa                     | <input type="checkbox"/> insufficient keratinised mucosa               |
| <input type="checkbox"/> unremarkable   |  |
| <input checked="" type="checkbox"/> at the same time as<br>bone augmentation (1 step) | <input type="checkbox"/> following<br>bone augmentation (2 steps)      |

### Bone situation

### Soft tissue situation

### Implantation

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