



Clinical Cases

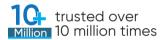
wound management











Palatal Free Gingival Graft

Hospital

Hefei Stomatological Hospital

Gender

Female

Age

27 years old

Compliant

Half a year ago, the patient had an implant restoration on the upper right central incisor. Recently, it was observed that the gingival margins of both central incisors are asymmetrical, and soft tissue grafting is required.

Preoperative intraoral examination

The gingival recession is significant, with no mobility (-), the palatal mucosa in the left upper posterior tooth area is pale and tough in texture, with no other abnormalities observed.

Diagnosis

Soft tissue defect at tooth 11.



Dr. Liu Kun China

Treatment plan

Removal of the original provisional restoration on tooth 11, palatal free gingival graft procedure, and reshaping of the gingival margin of tooth 11 after 6 weeks.

Treatment Process

- After local infiltration anesthesia, a free gingival graft was harvested from the palatal side of the hard palate area.
- When the tissue flap was separated from the hard palate, there was persistent oozing of blood from the wound.
- \cdot However, considering the patient's sensitivity to pain, $\textbf{Bona-aid}^{\text{TM}}$ was applied around the wound to create a secure protective zone.

- One day postoperatively, a pseudomembrane formed at the base of the wound, and the wound was healing well with a trend towards epithelialization.
- · Five days postoperatively, the connective tissue at the base of the wound had healed well.
- Twelve days postoperatively, the blood supply and soft tissues in the donor area had fully recovered, and they could be expected to fuse after several months. It can also be used in conjunction with **Bonaplug™** to ensure better healing of the donor area and reduce complications, resulting in even better outcomes.







Soft tissue augmentation in the posterior tooth implant area



Dr. Cao Zhengguo China

Hospital

Wuhan University Oral Hospital

Gender

Female

Age

59 years old

Compliant

The patient had two dental implants placed in the lower right jaw several months ago. Due to the absence of keratinized gingiva in the implant area, they have been referred to our department for a keratinized gingiva augmentation procedure.

Preoperative intraoral examination

The patient has a missing tooth at positions 45 and 46, with a width of keratinized gingiva in the edentulous area ranging from 1 to 2 millimeters.

Diagnosis

Dental arch defect (Kennedy Class III) with insufficient keratinized gingiva.

Treatment plan

Soft tissue augmentation - Free Gingival Graft (FGG) in the edentulous area.

Treatment Process

- Under local anesthesia, the gingival papillae in the edentulous area are preserved by performing a partial-thickness flap incision and then reflected.
- The recipient site is prepared, and the partial-thickness flap is repositioned and sutured to secure it in place.
- A free gingival graft (FGG) is harvested from the right palatal donor site, and the FGG is then meticulously sutured into the recipient area.
- The donor site is managed using **Bonaplug™** for cross-suspension sutures, which provides rapid hemostasis and facilitates repair.
- Concurrently, **Bona-aid™**, which has a double-layer composite structure, is applied to slow down the degradation cycle of **Bonaplug™**, stabilize the surgical site, and reduce the risk of secondary bleeding.

- One week postoperatively, the soft tissues in both the donor and recipient areas are in the process of healing, with the formation of a fibrin clot that is thickening and gradually epithelializing.
- Four weeks postoperatively, the donor site has completely healed, and blood circulation has been restored in the recipient area.
- The newly formed tissue has integrated well, and the width of the keratinized gingiva has increased by 2 to 2.5 millimeters.







Protection of the surgical wound after bilateral mandibular posterior implantation



Dr. Fu Dongjie China

Hospital

Hubei Provincial People's Hospital of Stomatology

Gender

Male

Age

31 years old

Compliant

The patient has been missing their lower molars on both sides for several months and now seeks to have the missing areas restored.

Preoperative intraoral examination

The patient has missing teeth at positions D7 and C5, with the mandibular alveolar bone resorbed to the level of the root bifurcation, and there is a deep overbite.

Diagnosis

The patient has tooth loss in the positions of D7 and C5.

Treatment plan

Implant restoration is planned for the D7 and C5 positions.

Treatment Process

- · Local anesthesia is administered, and the gingiva is incised and reflected to prepare the site for drilling.
- Implants are placed at the missing tooth sites D7 and C5. After inserting the cover screws, the alveolar bone is trimmed, and the wound is closed with interrupted sutures.
- After suturing the wound at D7, **Bona-aid™** is applied to provide immediate protection for the suture site.
- After suturing at C5, Bonapac™ is applied to secure the area.
 Both Bona-aid™ and Bonapac™ are wound protection materials that offer immediate protection to the suture site post-surgery.
- They have the effects of temporary hemostasis, preventing early suture irritation, and reducing postoperative pain.

- Two weeks after the surgery, the mucosa in the implant area has healed well with no signs of redness, swelling, or infection.
- The keratinized gingiva at D7 is well-developed, and the connective tissue at C5 is showing good growth.







Apical root resection surgery for lower anterior teeth.

Hospital

Periodontal and Mucosal Department of Anhui Provincial Stomatological Hospital.

Gender

Female

Age

66 years old

Compliant

Recurrent swelling and pain in the lower anterior teeth for several days.

Preoperative intraoral examination

Tooth #31 has a crown restoration in place, a sinus tract is visible in the gingiva, with a positive percussion response (+), and there is no significant mobility.

The overall oral hygiene is good, with probing depths (PD) ranging from 1–7mm, with 34% of sites having PD \geq 3.4mm, and bleeding on probing (BOP) present in 27% of sites.

Diagnosis

Chronic periodontitis. Fracture of the root of tooth 31.



Dr. Xu Yan China

Treatment plan

The patient is advised to undergo local incision and drainage, followed by irrigation and application of a medicament for observation. After four weeks of observation, there was no significant improvement noted, and it is suggested that the patient undergoes an apical resect-ion surgery for tooth31.

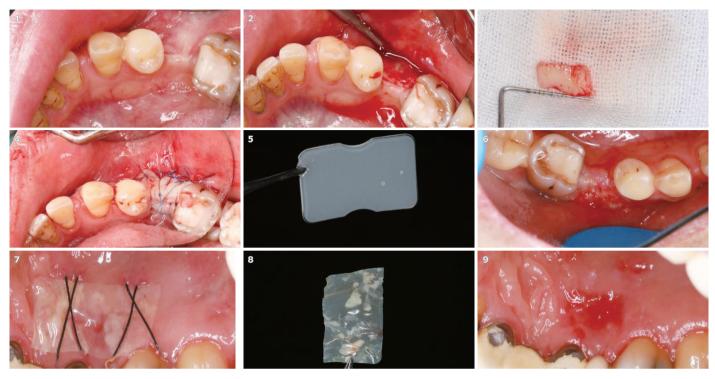
Treatment Process

- Under local anesthesia with Primacaine, incisions were made in the areas around teeth 31 and 41, and flaps were elevated.
- \cdot The apical 3mm of tooth 31 was resected, and the bone defect area was thoroughly debrided.
- Subgingival scaling and root planing were performed on teeth 31 and 41, followed by rinsing with saline solution and hemostasis.
- · The gingival flaps were repositioned and sutured, and ${\bf Bonapac^{TM}}$ was applied to the wound surface.

Outcome

Two weeks after the surgery, upon suture removal, the gingival color was normal, there was no inflammatory swelling of the soft tissues, and the keratinized gingiva had recovered







The palatal donor site is covered with Bona-aid™ to promote mucosal healing



Dr. Wei Yongxiang China

Hospital

Affiliated Stomatological Hospital of Guangzhou Medical University

Gender

Female

Age

52 years old

Compliant

Left lower posterior tooth has been missing for 10 years, seeking consultation for implant restoration.

Preoperative intraoral examination

Tooth 36 is missing, with severe alveolar bone atrophy, no gingival redness or swelling, and a width of attached gingiva of 1–2mm. Tooth 37 is mesially inclined. CBCT shows a width of 3–4mm for tooth 36, a bone height of 12mm, and class II bone.

Diagnosis

Dental arch defect

Treatment plan

Four months after the bone grafting procedure for tooth 36, a connective tissue graft was performed to widen the attached gingiva. Two months later, implant restoration was carried out.

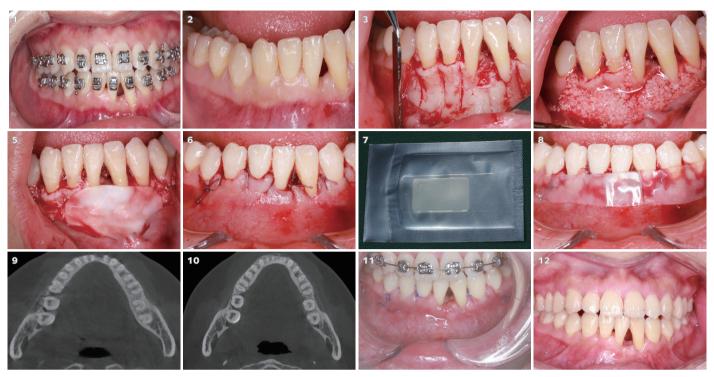
Treatment Process

- Preoperatively, there was a missing lower left posterior tooth
- A semithick flap was elevated, and the epithelium was repositioned apically, with sutures used for fixation.
- A free gingival graft (FGG) was harvested from the palatal side of the maxilla on the left side.
- The sutures were fixed to the buccal periosteum of tooth 36.
- Sutures were used to fix $Bona-aid^{TM}$ over the donor area on the left palatal side of the maxilla.

Outcome

Covering the oral wound with **Bona-aid™** can isolate the wound from external stimuli, reduce patient discomfort, decrease the likelihood of wound infection, and ultimately promote rapid wound healing. The use of sutures to assist in fixing the **Bona-aid™** in place can enhance the effectiveness of this treatment.







Lateral transposition flap repair for gingival defect after excision of gingival fibroma



Dr. Xu Yan China

Hospital

Anhui Provincial Stomatological Hospital

Gender

Female

Age

26 years old

Compliant

The labial bone plate of the lower anterior teeth is thin, and PAOO surgery is requested.

Preoperative intraoral examination

Oral hygiene is good, with the labial alveolar bone of the lower anterior teeth being prominent and having less bone volume, thick gingival biotype, and a keratinized width of 2-4mm.

Diagnosis

Chronic periodontitis of the lower anterior teeth with buccal alveolar bone plate resorption.

Treatment plan

Planned Periodontal Accelerated Osteogenic Orthodontics (PAOO) for the lower anterior dental region.

Treatment plan

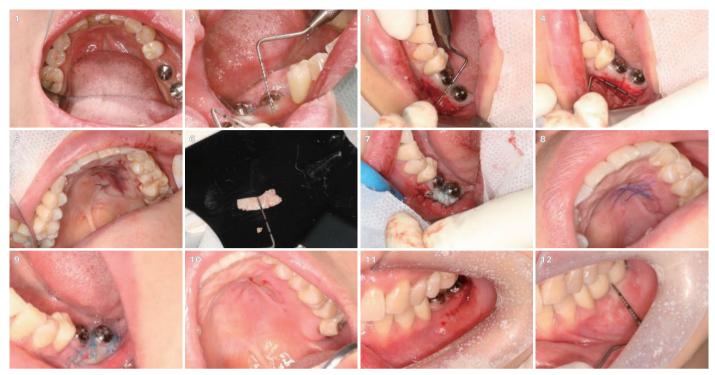
Planned Periodontal Accelerated Osteogenic Orthodontics (PAOO) for the lower anterior dental region.

Treatment Process

- \cdot Incision of the gingiva with a scalpel, covering the area from tooth 34 to 44, to fully expose the surgical field.
- Complete removal of plaque and calculus from the tooth surfaces, followed by acid etching and smoothing of the root surfaces.
- Implantation of bone graft material on the buccal bone wall in the area of teeth 33 to 43, with a collagen membrane covering the bone graft.
- · Relaxation of the gingival soft tissue to facilitate closure, followed by suturing the wound.
- · Application of **Bona-aid™** over the wound surface to protect the surgical site.

- After being protected by **Bona-aidTM**, the wound is placed in an artificially closed environment.
- \cdot This reduces the risk of infection from external factors and promotes the healing of soft tissues.
- Macroscopically, the soft tissue healing is observed to be good.







Treatment for keratinized gingiva deficiency in back tooth implant sites

Hospital

Jingzhou First People's Hospital

Gender

Female

Age

37 years old

Compliant

There is insufficient keratinized gingiva in the implant area, necessitating a keratinized gingival augmentation procedure.

Preoperative intraoral examination

Teeth 36 and 37 are missing, with an approximate width of keratinized gingiva on the buccal side of the edentulous area ranging from 1 to 2 millimeters.

Diagnosis

Non-aesthetic area dental arch defect (Kennedy Class II)

Treatment plan

Free gingival graft from the palate is transplanted to the buccal side of the lower left edentulous area.



Dr. Peng Guodong China

Treatment Process

- After local anesthesia, a semi-thick flap is dissected on the buccal side of the missing tooth site, the semi-thick flap is repositioned and sutured to the periosteum, and then the dimensions of the recipient bed are measured.
- · At the same time, connective tissue is harvested from the hard palate, the soft tissue flap is trimmed, and its thickness and width are measured.
- The free gingival graft is sutured onto the periosteum of the recipient area, and **Bonapac™** is used to seal and protect the wound between the gingiva and mucosa, also to reduce buccal friction and alleviate pain.
- In the donor area, **Bonaplug™** is used for suture suspension to stop bleeding and provide analgesia at the wound site.
- **Bona-aid™** is applied to the suture site for secondary protection of the wound.

- One week postoperatively, the donor site wound has healed well with stable fibrin clot, and the recipient site fibrin clot is forming and healing. The mucosa in the recipient area shows no abnormalities.
- Two weeks postoperatively, epithelialization has occurred on the palatal donor site, and the connective tissue has healed well. The keratinized gingiva in the recipient area is in the process of blood supply recovery.
- Four weeks postoperatively, the free gingival graft (FGG) in the recipient area has fully integrated with the gingival tissue and has good blood circulation, resulting in an increase in the width of the keratinized gingiva to approximately 4.5–5.0mm, with ideal vertical thickness and mesial-distal height.

FAQ wound management solution

This FAQ sheet describes the product characteristics of Bona-aid™ & Bonapac™, which help you understand the product and to instruct the treatment.

1. What is Bona-aid™? What is Bonapac™?

Bona-aid[™] and Bonapac[™] are both oral wound protection dressings used for physical protection of sutured and opened wound sites. Their main components are medical-grade polymers fully comply with USP and EP.

2. Why is it necessary to use "wound protection dressings"?

Clinical and literature evidences have shown that using "wound protection dressings" can promote wound healing. Due to the complex oral microbial environment, especially in individuals with weaker resistance, wounds are more susceptible to external stimuli, leading to pain, infection, bleeding, and discomfort from suture knots, which can affect wound healing. "Wound protection dressings" can effectively protect the wound, reduce the risk of infection, and provide a safe and comfortable treatment experience for patients.

3. What is the difference between Bonapac™ and conventional periodontal dressings?

Bonapac™ is essentially a paste-like wound protection dressing, focusing more on patient comfort and safety. It can be directly applied to the suture site without the need for mixing or dissolving, making it easy to use. It comes in individual single sue packaging, ensuring maximum safety. It has strong extensibility, does not harden by itself, fits snugly, and is less likely to fall off.

4. What is the difference between Bona-aid™ and Bonapac™?

Bona-aid[™] has strong adhesiveness and stability, reducing the tension of wound sutures and preventing the risk of wound opening. It can be used for hemostasis and protection of open wounds. Bonapac[™] has strong extensibility and shaping ability, making it more suitable for the protection and stabilization of closed wounds, effectively protecting wounds around abutments and in interdental spaces.

5. How long can Bona-aid™ and Bonapac™ protect the wound? How to extend the protection time?

The duration of wound protection is affected by factors such as saliva secretion, application site, and operation method. Under ideal conditions, the protection time for Bona-aidTM is 12-24 hours, and for BonapacTM, it is 8-24 hours. Since Bona-aidTM has a double-layer composite structure, with the active layer dissolving and the protective layer falling off on its own, the product can be sutured to the mucosa to extend the protection time. BonapacTM can have its dissolution time extended by adding a layer of vaseline on the outer layer.

6. Is it necessary to remove Bona-aid™ and Bonapac™ for a second time?

Bona-aidTM needs to be removed before sleep to prevent accidental swallowing or inhalation; BonapacTM does not harden and can dissolve completely, so it does not need to be removed.

7. Is Bonapac™ safe? What are its components?

Bonapac[™] is a medical-grade dressing, single use, making it very safe. It is composed of polyvinyl acetate, sodium carboxymethyl cellulose, hydroxypropyl cellulose, polyethylene glycol, polyethylene glycol and solvent.

8. Do the products contain any drug ingredients? How do they achieve hemostasis and promote healing?

Bona-aid™ and Bonapac™ are both synthetic polymer materials and do not contain any drug ingredients. They indicate for reducing bleeding, relieving pain, and promoting healing by the physical protection of the wound and providing a stable healing microenvironment.

9. If Bonapac™ sticks to the instruments, how to solve it?

The product contains hydrophilic polymer materials with adhesive properties, which give it better adhesion. The hydrophobic polymer materials inside facilitate shaping. To avoid sticking to instruments, simply wet the instruments during shaping.



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