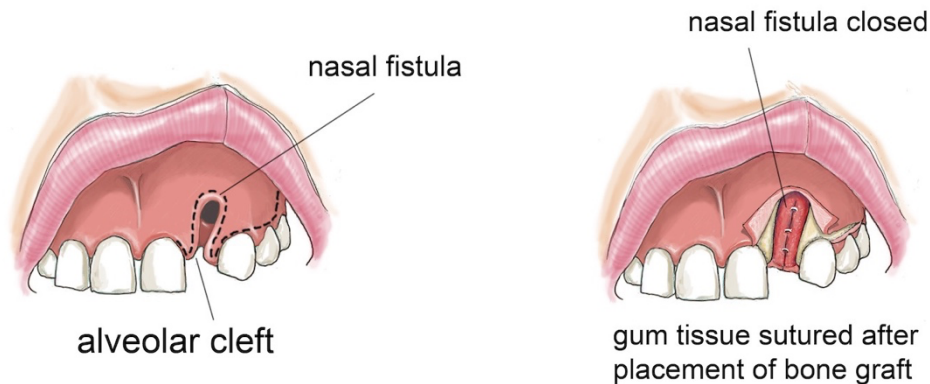


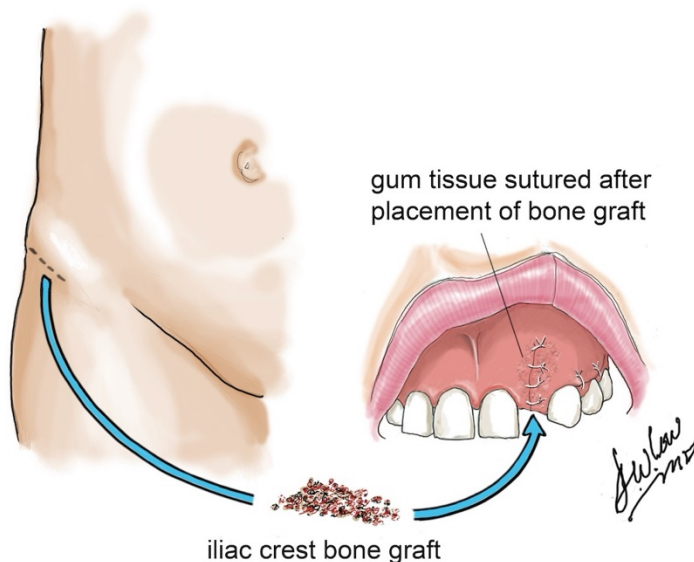
Instructions after Alveolar Bone Graft Surgery

Purpose of the Surgery

Bone grafts are used to fill in the bone that is not present in the gum area of the cleft, also known as the alveolus. Small pieces of bone from another part of the body, usually from a part of the hip called the iliac crest, are put into this space.

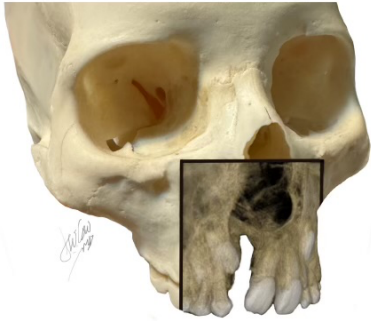


The small amount of bone that is removed from the hip will not affect the function of the hip or leg. The gum incision is closed with dissolvable sutures. Filling the gap helps to support the teeth to stay healthy. This also allows for orthodontic care to correct the position of the teeth. The age of bone grafting surgery varies from as early as age five to later teenage years. Occasionally, bone graft surgery needs to be repeated if there is not enough successful bone healing. In bilateral clefts, sometimes bone grafting on both sides is done in one stage, and other times it is best to be done one side at a time if the clefts are large.



Before Surgery

Dental x-rays or CT scan of the gum line are needed before surgery to see how much bone is missing from this area, and inspect the position and health of the surrounding teeth. Often, orthodontic treatment is helpful before surgery to expand the hard palate, widen the space of the bone cleft, and prepare the gums.



Things that can interfere with bone healing include bad oral hygiene, dental carries, and large fistulas in the gums and palate. The success of the surgery will be better if large fistulas are closed before bone grating. Dental carries should be treated before bone grafting surgery. Often it is necessary to extract primary teeth (baby teeth) that are in the area of the cleft. This should be done one month before surgery in order to optimize the healing of the soft tissue layers around the bone graft. Starting a mouthwash two weeks before surgery after meals and at bedtime can improve the oral hygiene in preparation for surgery. The care of the mouth after surgery is also very important for healing and successful bone graft surgery.

After Surgery

Drinking and Eating

After surgery, it is important to have a soft foods for one month to protect the incisions of the gums. This includes foods such as eggs, well-cooked pastas, macaroni and cheese, finely ground beef, blenderized foods, pancakes, soft bread, eggs, cottage cheese. Straws and objects in the mouth should be avoided.



Liquid Diet:
Days 1-3

Soup, jello, juice without pulp, and milk. Nothing hot.



Soft Diet:
Days 4-10

Foods cooked or mashed until very soft. Noodles are ok.



Regular Diet:
After 10 days

For one month avoid hard and sharp food like carrots, chips, nuts, and popcorn.

Oral Care

An oral splint or retainer is helpful to protect his gums. This is usually made by an orthodontist or surgeon before surgery. The splint should not be removed for 5 days after surgery. Your child must keep it in at all times, including at night and during meals. After five days, it can be removed to clean the splint and the teeth after meals and at bedtime, but should continue to be worn at all times for two to four weeks, or longer if instructed.



The stitches in the gum will dissolve; they do not need to be removed. It is important to keep the mouth clean after surgery. After meals the mouth should be rinsed to remove food particles with water or mouthwash (chlorhexidine if available). Do not brush the upper teeth for 5 days, while the splint is in continuously. You should brush the lower teeth normally. After

the splint is removed, use a soft toothbrush or wet gauze with toothpaste to clean the upper teeth. Do not brush the gums. You may brush all of the teeth normally after 1 month.

Wound Care

The dressing on the hip can be removed 2-4 days after surgery and the hip can be washed during bathing.

Activity

It is important to limit activity for 4 weeks after surgery to allow for best healing of the gums and hip. This includes sports, gym, and swimming for one month after surgery.

Medications

Pain Management

Your child may be in pain after surgery, but most pain can be well controlled with ibuprofen (Motrin) or acetaminophen (Tylenol). Follow the dosing instructions on the label or as prescribed by your doctor.

Antibiotics

5-7 days of antibiotics are typically prescribed after bone grafting surgery to minimize the chances of infection around the bone graft.

Complications

As in any surgery, rare problems can occur which include bleeding, infections, breakdown of the repair, and reactions to medicine. These problems are uncommon, and most of the time bone graft surgery has good results. Signs of infection include fevers, redness at the hip or drainage from the hip incision, or a bad odor from the mouth that does not go away with mouthwash and teeth cleaning.

The bone healing in the gums is typically assessed at 6 months after surgery with x-rays of the gums or a CT scan of the gums.