Alveolar Bone Graft

An alveolar bone graft is a surgical procedure where bone is placed to fill the gap in the gum region in children born with a cleft lip and a cleft palate. The alveolar bone graft is done several years after the child’s first cleft lip and cleft palate repairs. The timing of the alveolar bone graft is very important because it must be done as the child begins losing his or her baby teeth, before the permanent teeth come in.

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A piece of bone is usually taken from the iliac crest which is the upper ridge of the hip bone or another portion of the hip bone itself. The type of bone used is soft and can be easily shaped to form the patch which will close the hole in the alveolar bone. The gum will then be closed around the new graft and held in place with sutures whilst it heals.

What to expect after your child’s surgery

Your child’s alveolar bone graft surgery will be done under general anaesthesia, which means that he or she will be sound asleep during the surgery and will have no memory of it. This surgery usually takes about 1-2 hours, depending on the type and size of graft your child needs. Your child will stay overnight in hospital for at least 1-2 days after the surgery.

What can my child eat after surgery?

> Initially your child will have a fluid infusion via a drip. The infusion will be reduced as your child is able to drink and eat orally.
> Immediately after the surgery, your child may not be allowed to eat or drink for at least 4-6 hours, to allow time for the wound to begin healing and reduce risk of bleeding.
> Your child will then slowly be allowed to start drinking clear fluids (water, cordial, apple juice, icy poles and jelly) and then may start eating soft food.
> Children need a variety of foods each day to provide them with the nutrition they need to grow and develop. Following surgery your child will not be allowed to eat certain foods. This is to make sure that the surgical site is not damaged in any way. Your child may also have a sore throat.
> It is important to consider the types of food and drinks that you offer your child until they are back on their usual diet so they don’t miss out on any vitamins or minerals

What is a soft diet?

> A soft diet has been suggested by your surgeon to help with wound healing. Your child should continue on a soft diet for about three weeks or until your surgeon is happy for other foods to be added. During this time it is important to rinse your child’s mouth with water after they have eaten any food.
A soft diet contains foods that do not require a lot of chewing and are easily swallowed. A soft diet texture should be able to be mashed when pressed with a fork.

Foods that may interfere with the stitches should be avoided for a few weeks or until your surgeon tells you when it is appropriate (e.g. crusts, sharp-edged foods, hard fruits and vegetables)

**Try to include foods from the following food groups every day:**

- Milk and other dairy products
- Offer custards, yoghurts, milkshakes / smoothies
- Cheese sauces as a base for mornay, pasta or rice dishes can make meals more interesting

**Meat, chicken, fish, eggs, legumes and nut pastes**

- Dry, chewy meats should be avoided. Instead use minced, moist meats including mince (red or white meat), tuna or soft mashed fish (e.g. spaghetti bolognese, tuna mornay, shepherd’s pie)
- Omelettes, mashed boiled eggs and scrambled eggs are good options.
- Include legumes such as soft baked beans, lentils in a soup or stew or hummus dip
- Include smooth nut pastes (peanut butter) spread on soft bread or added into smoothies/milkshakes

**Cereals**

- Breakfast cereals softened with plenty of milk (e.g. weetbix, porridge).
- Well-cooked noodles or pasta with a cheese or meat sauce.
- Soft bread (no crusts, no toast, no multi-grain bread)

**Fruit and vegetables**

- Soft, mashed fresh fruit (eg bananas, peaches), canned or stewed fruit.
- Fruit can be served separately or with yoghurt, custard or fruche
- Well cooked, mashed vegetables

**Other useful information**

- After three weeks on a soft diet, gradually introduce more solid foods. After several weeks your child should be back to their normal diet
- All children are individuals and will progress to their usual diet at different rates. Be guided by your child’s progress

**Pain Management**

- Your child may return to the ward with a Patient Controlled Analgesia (PCA). A PCA is a form of pain relief that is controlled by the patient via their drip. Your child can press a button to receive pain relief according to your child’s weight.
- Alternatively your child may return with an analgesic infusion which is controlled by the nursing staff. This will give pain relief continuously via their drip.
- For more information refer to ‘Patient Controlled Analgesia’ or ‘Analgesic Infusion’ information sheets

**Wound / Mouth Care**

- Mouth care is important post oral surgery to ensure the wounds remain clean from food allowing optimal healing.
- You may use mouth wash or sips of water
- Check wound after cleaning to ensure all residual food has been removed
> Your child may brush their teeth as they would normally do at home
> Metal spoons, drinking straws and toys are not allowed to be used in the child’s mouth due to the risk of disturbing the wound site. When eating solids a smooth edged, plastic or rubber coated spoon should be used. Spoons should only be used to the lip margin.
> A wound drain may be inserted into the donor site during the surgery. Wound drains are used to prevent and/or remove fluid collections and minimise the risk of infection in a wound. The drain will be secured well to prevent accidental removal. The drain will usually be removed 24-48 hours post operatively.
> Your child will be given antibiotics via their drip in theatre and may continue after theatre for 1-2 days.
> The stitches used are dissolvable and do not need to be removed

Mobilising
Encouraging your child to get up and move around as soon as possible can help with their recovery. Small movements like sitting on the edge of the bed or sitting out of bed in a chair are positive steps. This will assist in the doctors deciding when the wound drain can be removed.

Information for Discharge

> **Mouth care:** rinse your child’s mouth with water or mouth wash (if supplied) after eating or drinking whilst your child is on a soft diet
> **Soft diet:** your child will need to eat a soft diet for 3 weeks after surgery or as advised by your surgeon
> **Pain relief:** you may give your child paracetamol or ibuprofen if they have any pain.

Contact the Craniofacial Unit, your local GP or private surgeon if your child has any of the following problems:

**Signs of possible infection:**
> Increasing pain or pain not relieved by paracetamol or ibuprofen
> Ongoing fever
> Generally unwell
> Reduced eating and refusing to eat
> Bleeding/ooze from your child’s mouth

Even once you have discharged, there is still a risk of bleeding after the surgery. If your child has any of the following signs of bleeding:
> Swallowing more than usual
> Coughing or spitting fresh blood (bright red)
> Return to the Women’s and Children’s Emergency Department

Follow up appointments
You will be given an appointment time for approximately 1 week following your child’s surgery in the Craniofacial Unit

Contacts
If you have any concerns after your child’s discharge please telephone the Craniofacial Unit on (08) 8161 7000 and ask to speak to a member of the Craniofacial Team

For more information
Australian Craniofacial Unit
Surgical Services
Level 1 Reiger Building
Telephone: (08)8161 7235

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