The National Cleft Surgical
Service for Scotland

Alveolar Bone Graft (ABG)

Information for parents/carers

The Royal Hospital for Children (Glasgow), where the ABG surgery will take place.

Photo showing gap in the gum (alveolus) before an ABG. The gap is closed using bone from the hip during the ABG.

What is an Alveolar Bone Graft?

A bone graft is an operation where a piece of bone is moved to a different part of the body. ‘Alveolar’ means gum. An Alveolar Bone Graft (or ABG) is an operation where a **small bit of bone is taken from the hip, and put into the gap (cleft) in a gum**.

Why does my child need an ABG?

For some children with a cleft, the gap involves the bone in the gum (‘alveolus’). This can be a problem when the adult teeth are ready to come through, as they need bone to grow into. **An ABG provides the bone the adult teeth need**. It can also help to close the gap between the mouth and nose, if there is one.

When will the ABG happen?

The best time for the ABG is **when the adult teeth are ready to grow through**. This is usually between 8-11 years old.

The Cleft Team will decide the best time for your child's ABG by checking how their teeth are developing. This may involve different types of assessment (i.e. looking in the mouth, X-Rays). It may happen over more than one appointment.

What needs to happen before the ABG?

It is extremely important that your child's **teeth and mouth are kept very clean** before and after the ABG.

Sometimes, the Orthodontist decides that **using a brace and/or removing teeth** before the ABG would be helpful. Not all children need this. The Orthodontist will discuss this with you.

If your child has speech therapy, this may pause whilst your child has braces and/or their ABG. Your Speech and Language Therapist will discuss this with you.

How many surgeries does the ABG involve?

The **vast majority of ABGs require only one surgery**. For some bilateral (two sided) clefts, however, the surgery is best done in two stages. The Surgeon will discuss this with you.

What happens once we are ready for the ABG?

When the Cleft Team decides that your child is nearly ready for their ABG, they will **add them to the surgery waiting list**. They will tell you when this happens. How long your child is waiting depends on how soon they need the ABG, when surgery slots are available, and how many others are on the list. The Cleft Team can suggest how long you will be waiting, but this can change.

When your child is near the top of the list, a Cleft Team Coordinator will **contact you with a provisional (suggested) ABG date**. They will phone to tell you whether this is confirmed about 4 weeks before this date. This means **you should have around 4 weeks notice** to make work, travel and/or childcare plans.

What happens once we have a surgery date?

Once the date is confirmed, you will be sent more detailed information about the hospital and care after the ABG (i.e mouth care, smooth/soft food ideas). **Your child can eat normally up until their ABG**. However, writing a list with them of smooth/soft food they like can give you ideas for afterwards.

You need to have a **'pre-admission' appointment before the ABG** to make sure your child is fit and well for surgery. If you are local to Glasgow, this usually happens at the Royal Hospital for Children a week before the ABG. For other patients, this may happen either by phone or on the day of the ABG.

Where does the ABG happen?

All children's cleft surgery in Scotland now happens at the **Royal Hospital for Children in Glasgow**. You will be sent useful information about the hospital (ie. travel, accommodation) once you have your ABG date. You can also visit the hospital website (see 'Contacts').

All children having cleft surgery stay on Ward 3B. **Your child will usually have their own room** here, with a pull down bed for **one adult** to stay on. Parents/carers can visit at any time. Other accommodation (i.e. for a second adult) will depend on your local NHS board. You can discuss accommodation and travel with the Cleft Team Coordinator once you have an ABG date.

Some families find visiting the hospital helps them prepare. **The ward staff are happy to show you around** on the day of a pre-admission appointment (if you have one). If you want to visit at another time, please phone the Cleft Clinical Nurse Specialists.

What happens once we are in hospital?

Once in hospital, you will come straight to ward 3B. **Your child will need to stop eating ('fast') for a few hours before their ABG**. You will get instructions about this before you come in. The play staff on the ward can help children with feelings of hunger, boredom or worry during their stay in hospital.

Your child will need to have **a thin plastic tube (called a 'cannula') put into the back of their hand**. This is done with the use of a cream or spray that makes the skin numb, so they cannot feel the tube going in. The tube is used to give medicine.

When your child is ready for surgery, they will go to the anaesthetic room. This is where they are **given medicine to go to sleep ('anaesthetic')**, so they will not feel or remember any of the operation. The medicine can be given **either through a mask, or through the tube in the back of their hand**. One adult can come to the anaesthetic room, if wanted.

What happens during the ABG operation?

During the operation, the Surgeon takes a coin-sized piece of soft, spongy bone out of your child's hipbone. They put this into the gap in the gum. They then sew the gum and hip up with stitches called 'sutures'. The sutures fall out by themselves as the wounds heal, so no stitches need to be removed.

The operation takes between **1 and a half to 2 hours. However, the time your child is away from you is longer**. This is because of the time it takes to prepare them for surgery, and wake them up afterwards.

Will you do any other surgery at the same time?

Sometimes, children have another operation done at the same time as the ABG (i.e. on a scar). **This will *only* happen if you have decided it with the Surgeon**. Please talk to the Cleft Team if you want to discuss this.

What happens after the ABG?

Your child will come back to the ward when they are awake and settled. Some children may become sick or dizzy after the ABG because of the anaesthetic. This soon wears off. Your child will have a tube of water (called a 'drip') in the back of their hand to stop them getting thirsty.

Your child's mouth may feel or look swollen, and their hip may feel sore. They will have stitches in their mouth, which may look sore, and they will have a (medicine) drip in their hip. They will be given medicine to help with discomfort, and should feel better after a few days of rest.

Most children are ready to go home within 2 days. The Nurses will give you instructions for care at home (i.e. wound care) when you leave the ward. You may be given antiobiotics and painkillers to take with you.

What happens once we are home?

At home, you need to **keep the mouth very clean** and **try not to damage the ABG area**. This lowers the risk of infection and/or the ABG not working. Good tooth brushing (being gentle near the ABG), medicated mouthwash and a smooth/soft diet are essential. You will get information on this. The sutures normally fall out in about 3-6 weeks.

It is **important that children let their hip heal**. They should **rest from exercise** (i.e. football, dance, PE) for around 4 weeks, and

avoid contact sports like rugby for 6 weeks. Thinking of other fun things they can do can help with frustration about this. The scar on their hip will be about 3-5cm long and easily covered by underwear. It will fade over time.

Most children **look and feel back to normal within 2 weeks** after the ABG. You can reassure them of this. The Nurses will see you around 6 weeks after the ABG to follow up. The Surgeon and Orthodontist will see you 6-12 months after the ABG.

Will my child need time off school?

If it happens in school time, the Team suggest that children have around **one week off of school** to rest after their ABG. It is fine to for them to do classwork at home in this time if wanted. The Nurses will give you a letter to pass on to their teacher about the need for a soft diet and rest from exercise once back in school.

What should I tell my child?

For many children with a cleft, the ABG is the first surgery they will be aware of. Parents and carers often feel unsure how their children will find the experience (or being told about it). Some feel it may be better not to tell them what will happen.

The Cleft Team **strongly encourage telling your child they will be having their ABG** (and why). If they are told what will happen in a plain, non-worrying way, they will be better prepared. On the other hand, not talking about surgery (or cleft) can accidentally give the message that it is bad/ worrying.

The Team have written a guide for children about having an ABG**.** **Reading this with your child** can help them understand what will happen and why. It also gives them a chance to talk about any worries (which the Team can support), and be a part of decisions (i.e. which side to have the scar on).The child’s guide has a page on the back for you to fill in together.

I am concerned about how I/my child will cope. What should I do?

It is completely normal for both children and adults to feel a bit worried about unusual situations like surgery.

However, if you are very worried about how you or your child will cope with their ABG, you can **contact the Cleft Clinical Psychology Team**. They can discuss your concerns, and suggest ways to help manage them. This can involve face to face appointments with the Clinical Psychologists, or a referral to the Specialist Play Service (who prepare children for what will happen in hospital), if helpful.

Resources

Great Ormond Street Charity: ABG cartoon for children

https://www.youtube.com/watch?v=YZanCoBSkac

What? Why? Children in Hopsital: Child friendly videos on getting a cannula and general anaesthetic (including play ideas)

https://www.whatwhychildreninhospital.org.uk/

Royal Hospital for Children: Information about the hospital

http://www.nhsggc.org.uk/patients-and-visitors/main-hospital-sites/queen-elizabeth-university-hospital-campus/royal-hospital-for-children/

Contacts

Cleft Team Coordinators: 0141 451 6524

For queries about waiting lists, appointments and hospital arrangements.

Cleft Clinical Nurse Specialists (Voicemail): **0141 452 4562**

For queries about the ABG process or care.

Cleft Clinical Psychology (Secretary): **0141 451 6524**

For queries relating to worrying about/ talking about/ coping with surgery.

Questions for the Cleft Team

(to phone/bring to appointment)

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