

**Provincial Health Services Authority** 

**BC Children's Hospital Audiology Services** 

## Bone Conduction Hearing Implant Program

Cochlear<sup>™</sup> Osia<sup>®</sup> System at BC Children's Hospital

The BC Children's Hospital Bone Conduction Hearing Implant Program is currently using the Cochlear<sup>™</sup> Osia<sup>®</sup> System for most of our implant recipients. The following information brochure is specific to the Osia device only.

### Meet your clinical team

Dr. Neil Chadha Otolaryngologist, implant surgeon

### Annie Wang Clinical audiologist

Alison Beers Audiology coordinator **Dr. Mark Felton** Otolaryngologist, implant surgeon & medical coordinator



## Some important things to know about the Osia device

- Frequent battery replacement. The Osia system requires more power to function than your softband device. The Osia sound processor needs to receive sounds from the environment, transmit a signal across the skin and power up the internal implant, which is the reason it requires more power. Battery life can be as short as 1-3 days depending on wear time and time spent streaming. There is currently no rechargeable battery option.
- Magnetic resonance imaging (MRI) precautions are required. Your child can have a MRI of up to 1.5 Tesla, including a head MRI, with the implant in place as long as the appropriate precautions are taken. A BCCH Bone Conduction Hearing Implant Program surgeon (otolaryngologist) should be consulted if your child requires a MRI.
- Security detectors. Your child may set off the security detectors at airport security checkpoints with the device on, as well as detectors at sporting events and concerts. They will get an implanted device identification card following surgery that they should carry with them.

## **Appointments at BC Children's Hospital**

Your initial four in-person appointments are scheduled up-front and cannot individually be changed.

APPOINTMENT TYPE	DATE
Pre-operative assessment	
Implant surgery	
Implant activation	
Post-activation follow-up	

Following these four initial appointments, we will see your child for routine monitoring, 1-2 times per year.



## Pre-operative assessment at BC Children's Hospital

### DATE:

This is your first in-person meeting with the team. We gather some pre-operative measures of speech understanding in quiet and in background noise, with and without your child's hearing equipment on. It is important that you bring your current, non-implanted hearing equipment to this appointment with you.

### At this appointment we will:

- Complete the pre-operative audiology assessment protocol
- Discuss successes and challenges with your child's current equipment
- Review the Osia implant and processor
- Select the accessory that comes with the device

Families from out of town will typically be scheduled for this appointment on the day prior to their surgery.

## **Implant Surgery**

#### DATE: \_

Carefully review the Bone Conduction Hearing Implant Surgery document and ensure that you contact the ENT clinic nurse with any questions.

BCCH ENT office line: 604-875-2113 BCCH ENT clinic nurse: 604-875-2345 ext. 7053 Monday to Fridays, except holidays 8:30am-4:30pm



# Implant activation appointment at BC Children's Hospital

#### DATE:

Implant activation is scheduled 5-6 weeks after surgery to give the incision a chance to heal and the titanium implant screw a chance to integrate with your child's skull (osseointegration).

### Prior to the implant activation appointment:

Please download the **Osia Smart App** and create a user account. The Osia app allows you to use your phone as a remote control: to change listening programs, track processor use and locate a lost device. Check the Cochlear website to see if your mobile phone is compatible to use for direct streaming and Osia Smart App use.



### At the activation appointment:

- We will **select the correct magnet strength** for your child. We will work to find the right balance between having the magnet in the processor strong enough to hold the device in place but not so strong that it damages the skin underneath.
- Your child will be able to hear through the Osia system for the first time when we switch it on.
- We will help you pair your iPhone or iPad, and other accessories
- We will teach you how to navigate the Osia Smart App

When you go home from this appointment, it is very important to discontinue use of the Osia processor if there is any pain reported by your child or redness of the skin at the magnet site, and contact the bone implant team audiologist or surgeon for further guidance.

Please keep a journal of how things are going and any questions you have from the time of activation to 6 week follow-up.

### **Post-activation follow-up**

#### DATE: \_

Follow-up will be in person at BC Children's Hospital, 5-6 weeks following the implant activation appointment.

### In preparation:

• Bring your questions that have come up since the implant activation.

### We will:

- Repeat the audiological testing we did pre-operatively, but now using the Osia device.
- Check the skin under the processor for any signs of irritation.
- Make any changes needed to the Osia processor settings or magnet strength
- Look at the app and wear time tracking with you
- Answer any questions about the device or the accessories
- Discuss what additional equipment is needed, such as personal FM equipment in the classroom

### **Next steps**

- Your child is now going to be seen for routine monitoring appointments, 1-2 times per year or sooner as needed.
- Contact your implant team audiologist any time with equipment loss or damage issues.
- Register a Cochlear Family account.
- Contact Cochlear directly for device support, troubleshooting support, to request replacement equipment, or order batteries or accessories: Customer@Cochlear.com or call 1-800-483-3123
- There is a 3 year warranty on the device, and a one time loss replacement within the first 2 years. Families will get notified by Cochlear 90 days before their warranty expires, and they can purchase extended warranty if desired.



