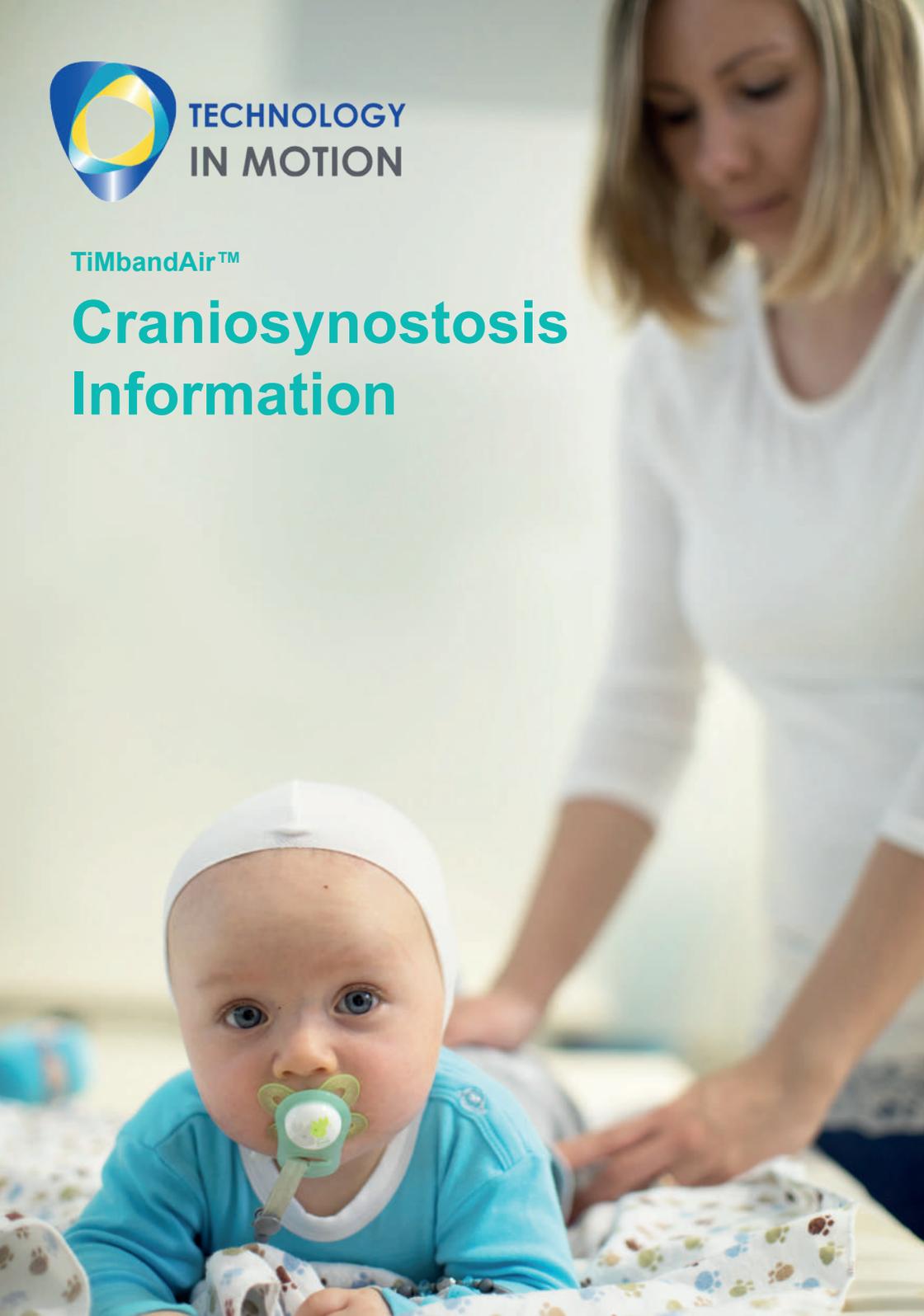




TECHNOLOGY  
IN MOTION

TiMbandAir™

# Craniosynostosis Information



## TiMbandAir™ Craniosynostosis Treatment

If your baby has a prematurely closed suture, known as a synostosis Technology in Motion offers orthotic treatment to allow the head shape to grow to a more natural head shape after endoscopic surgery.

Treatment is progressive and can continue until your baby is up to 18 months of age. As your baby's head grows, the TiMbandAir orthosis (helmet) gently allows the head to grow back into a normal shape.

### What's involved in treatment?

After the suture is released, the head can now grow where it couldn't before. Very soon after your baby's operation, usually within the first few days an external surface scan of your baby's head is taken. This might be at the hospital or at one of our clinics after your baby has been discharged.

The scanners that are used for this are usually hand-held white light cameras or if it's in hospital it might be a series of cameras placed in a circle around your baby's head.

The scan is sent to our labs and modified to make space where we want the head to grow and to control where we want to hold growth allowing your baby's head to grow back into shape.

We use the modified shape to exactly fit a 3D printed orthosis ready for your baby to wear. All of our orthoses are configured by regulated clinicians and overseen by a craniofacial consultant professor ensuring total effective treatment.

The orthosis is fitted within 2 weeks of the scan to ensure that we make sure that growth is caught and redirected to give the very best result available. We don't stop growth; we just allow it to go where it will improve your baby's head shape.

Your baby will be growing very quickly at the start and we will regularly see you to review progress, making sure that everything's going as we need it to. We keep your medical team up to date on your baby's progress so that they know what to expect at your next review with them.

Your baby will usually need two or three TiMbandAir orthoses and as they become outgrown, we'll take scans ready for the next one to be made with no interruption of treatment.



You can stop treatment at any time you wish, but to gain the maximum improvement we recommend up to 3 orthosis treatments spanning about 15 months. Technology in Motion uses the TiMbandAir™ CS orthosis for treatment. It's a lightweight, breathable orthosis which has been developed over several years.

The revolutionary design and modifications are developed from years of treating infants who have had endoscopic surgery and we know that it's a leader in the field of orthotic treatment. The shell is 3D printed nylon with a soft closed cell non allergic foam liner.

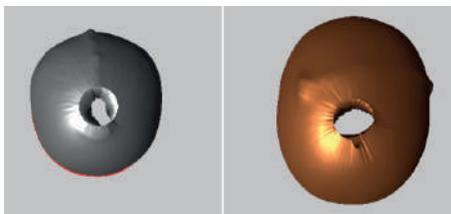
### Why does your baby need more than one orthosis?

This is because we can't get all of the changes that we need to accommodate your baby's growth in a single orthosis. Think of it as being similar to footwear; as your child grows the right sized footwear is needed, just getting oversized footwear waiting for growth doesn't work.

Orthotic treatment is the same, we need to make sure that we're allowing controlled growth continually.

### Does the TiMbandAir work for all types of synostosis?

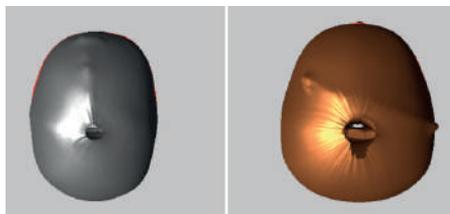
All of our orthoses are custom made to fit each baby and each type of synostosis requires a different design of TiMbandAir. Here are some illustrations of the results that have been achieved using post-surgery orthotic treatment.



#### Bicoloral Sutures

Age at op: 4.5 months  
3 orthoses

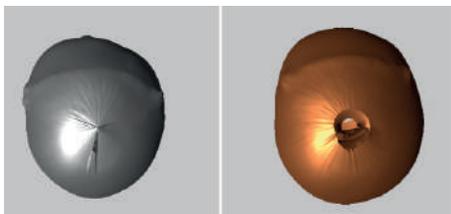
Treatment duration: 11 months



#### Sagittal Suture

Age at op: 5.5 months  
2 orthoses

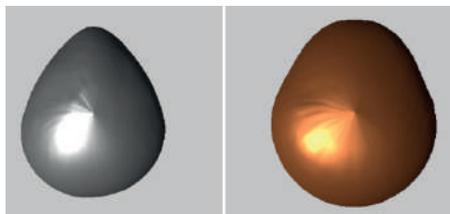
Treatment duration: 7 months



#### Right Unicoronal Suture

Age at op: 4.5 months  
2 orthoses

Treatment duration: 7 months



#### Metopic Sutures

Age at op: 4.5 months  
3 orthoses

Treatment duration: 12 months



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