STARband® Cranial Care Programs

STARband — the most prescribed cranial remolding orthosis in the world

Cranial assessments are an integral part of pediatric care programs. The following information provides an overview of the collaborative partnership of pediatric care providers and STARband cranial clinicians. Infants and their families will benefit from early identification, monitoring and treatment of skull deformities from an experienced and interdisciplinary care team.


LUCAS

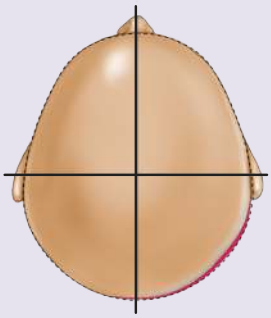
Qualitative Assessment of Skull Deformities

With the influence of the Back to Sleep program and a variety of other situational factors, today's infants tend to spend an extraordinary amount of time on their backs. This early and sustained supine positioning can have detrimental effects on the proportional and symmetrical growth of the skull. Deformational plagiocephaly is estimated to affect approximately 20% of all babies. The Argenta[1] classification scale provides specific descriptions for five (5) types of deformational plagiocephaly and three (3) types of deformational brachycephaly. This quick and easy qualitative assessment can be performed in the clinic by visual assessment alone and does not require special tools or equipment. Orthotic evaluations are indicated for infants with moderate to very severe skull deformities who have been non-responsive to repositioning efforts.

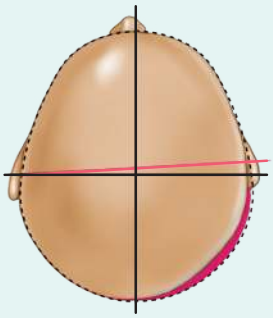
Repositioning and tummy time are the initial course of action for all infants with altered head shapes, especially before four months of age. After four months, infants with moderate to severe head deformities and those non-responsive to repositioning efforts should be referred for orthotic evaluations.

Deformational Plagiocephaly (DP) — Primary deformity is asymmetry.

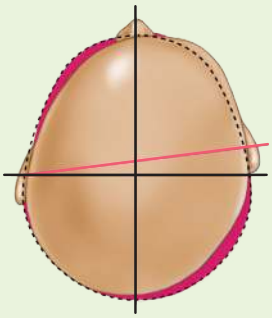
TYPE I – Normal



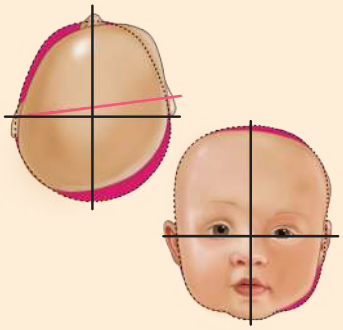
TYPE II – Mild



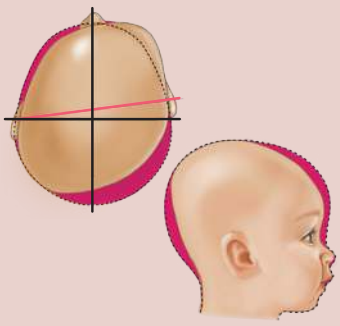
TYPE III – Moderate



TYPE IV – Severe

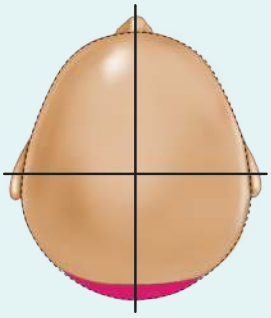


TYPE V – Very Severe

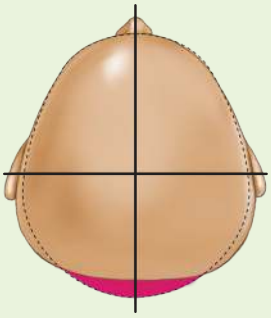


Deformational Brachycephaly (DB) – Primary deformity is disproportion.

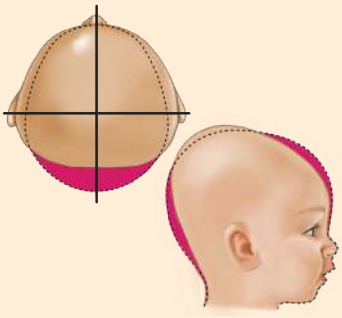
TYPE I – Mild



TYPE II – Moderate



TYPE III – Severe



Bright Futures[2]

Well-baby visits are often planned at 2–5 days after birth, and at 1-, 2-, 4-, 6-, 9- and 12-months of age. During the first six months, it is important to educate and confirm the importance of both the Back to Sleep program and substantial amounts of supervised tummy time. Physical examinations of baby's head include evaluation of the neck muscle weakness/asymmetry/tightness, the cranial sutures and fontanelles, and the overall head shape development. Skull asymmetry and/or disproportion should be documented in the medical chart with additional education and discussion about repositioning and tummy time activities—both of which are most effective at potentially changing the overall head shape in the first three to four months. Sustained asymmetry and disproportion should be referred to a pediatric physical therapist and/or STARband specialist for further assessments and treatment recommendations. Plagiocephaly has been identified as a marker of elevated risk for developmental delay, and limitations to head movement may further disrupt functional motor development. Clinic documentation at well-baby visits of the head shape, and the education on repositioning are both necessary to meet coverage criteria for most payers if the head deformity remains and a cranial remolding orthosis is prescribed.

CNS Guidelines[3]

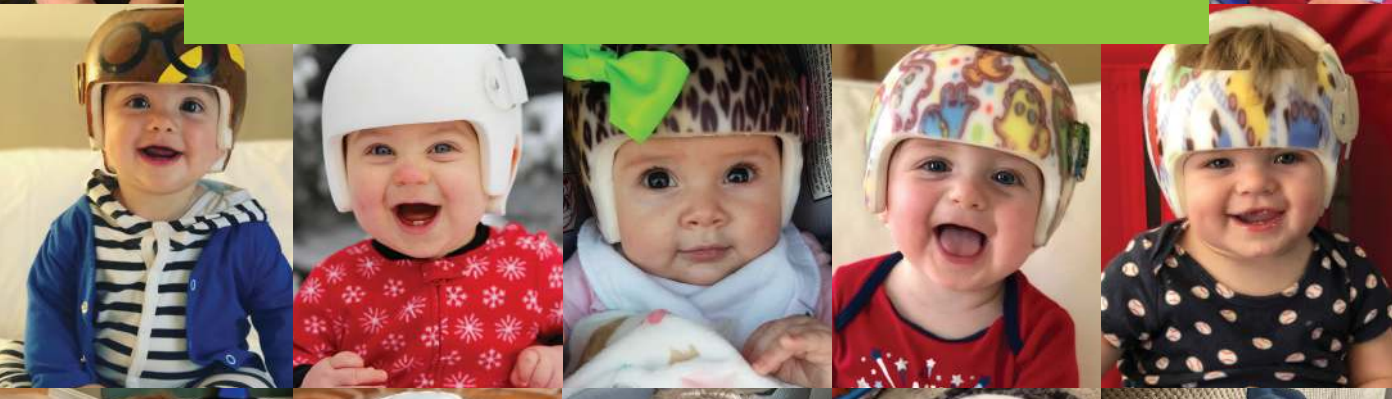
The American Academy of Pediatrics has endorsed the Congress of Neurological Surgeons (CNS) publication titled Evidence Based Guidelines for the Treatment of Pediatric Positional Plagiocephaly. A summary of the recommendations includes but is not limited to:

1. Pediatricians are able to make a definitive diagnosis of deformational plagiocephaly by physical examination alone in most cases.
2. Repositioning is an effective treatment for deformational plagiocephaly, and is most relevant to young infants, usually four (4) months of age or younger.
3. Physical therapy may be required for some infants with neck muscle involvement.
4. Cranial remolding headbands are recommended for infants at least four months of age with persistent moderate to severe plagiocephaly after a course of conservative treatment, e.g. repositioning, tummy time, physical therapy. Cranial remolding orthoses are also recommended for older infants with moderate to severe plagiocephaly, when repositioning efforts are no longer effective.

The CNS publication also notes that infants with a more severe deformity yield better clinical outcomes when orthotically managed at an earlier age.

STARBAND — THE GOLD STANDARD

More than 400,000 infants have been successfully treated with the STARband. The STAR® Family of orthotic designs includes several variations to best meet the needs of the patient and family. The most common design includes a plastic outer shell with a side-opening and soft, thick inner liner. Full coverage means full correction! The design is intentional to allow for the successful completion of treatment for nearly all deformational plagiocephaly and brachycephaly patients in a single orthosis. This presents a significant cost savings to families and payers.



STARband—One and Done!

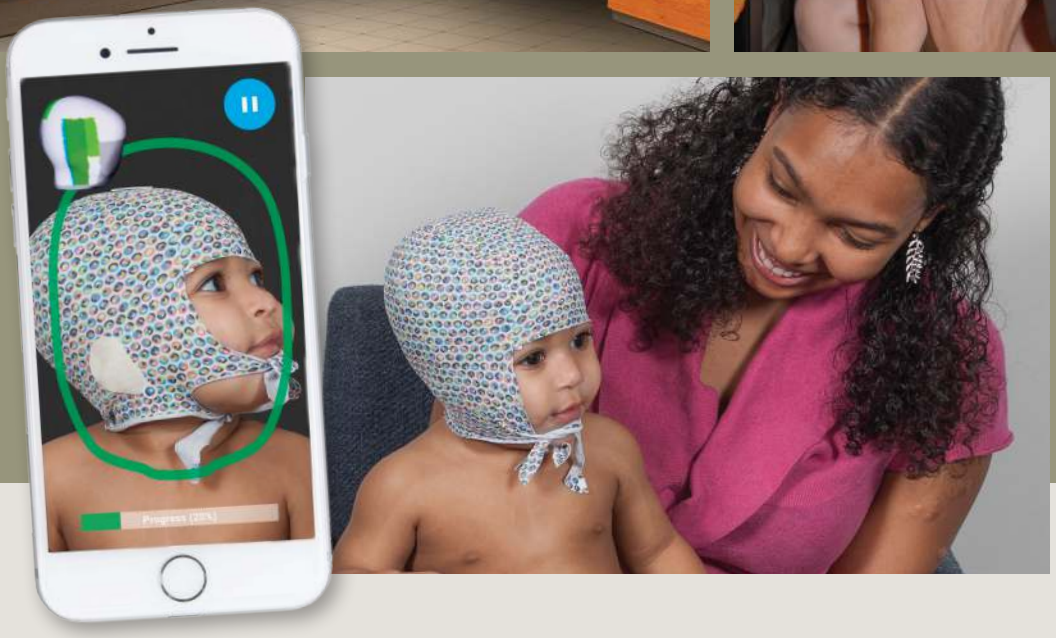
Did you know that over 98% of patients needing a STARband to treat deformational plagiocephaly require ONLY one headband? Experienced cranial clinicians exclusively use STARband designs. Moderate to severe deformities are indicated for orthotic treatment and require up to 3cm of directed circumferential cranial growth to correct skull deformities. Families must comply with the recommended 23 hour per day wearing schedule to capture any and all intermittent growth spurts. They must also comply with the follow-up schedule for the strategic modification of the headband fit and function relative to continued cranial growth. If the clinical protocols are followed, there are rarely indications for a second headband.

Clinical Partners—STARband Specialists

Partnering with an experienced STARband clinician is key to the success of the cranial care program. STARband cranial clinicians have extensive experience and expertise in the management of infants with skull deformities. Referrals to a STARband clinician will ensure the most thorough evaluation process, use of advanced scanning technologies, and documentation of anthropometric measurements. This is combined with exceptional clinical experience to provide the most appropriate treatment recommendation and follow-up program. Not all infants need a cranial orthosis just as not all infants respond to even the most consistent repositioning and therapeutic techniques. Recommendations for STARbands are made only for infants with moderate to severe skull deformities.

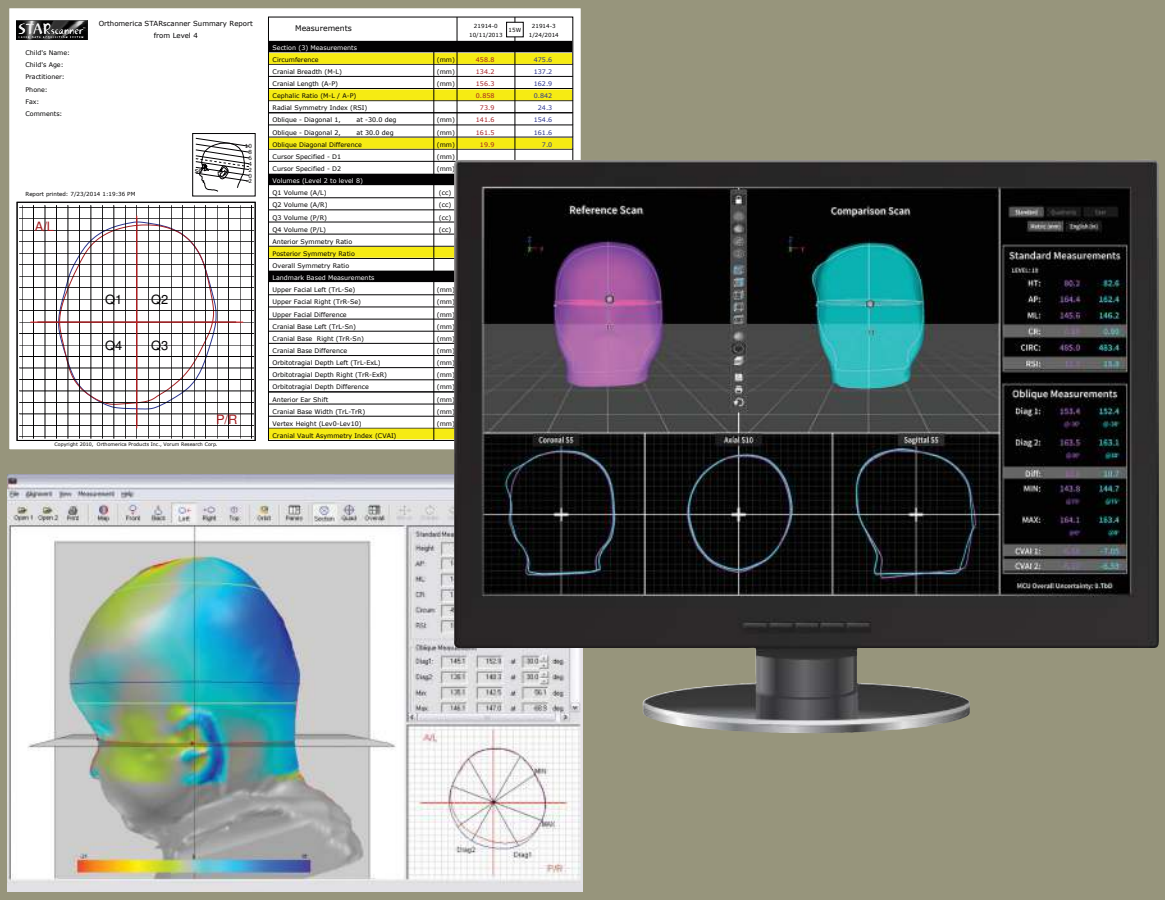
Insurance

Strict adherence to and complete understanding of different coverage policy criteria are necessary to ensure that families are able to optimize their individual insurance policies. Orthotic and prosthetic patient care centers are contracted with many different insurance companies, and have experienced administrative staff to manage these submissions. Check with your local STARband clinician for a list of contracted payers.



Advanced Pediatric Scanning Technologies

For the last 20 years, the STARscanner® has been the leader in scanning technologies for infants with cranial deformities, as it was specifically developed to meet the needs of this patient population. Cranial scanners for infants must be safe, accurate and fast to capture the required head shape data from these little patients. The SmartSoc® scanner was later developed for increased portability and to expand the access of care for patients in various geographic areas. The STARscanner and SmartSoc are the most accurate laser and hand-held scanners available for cranial applications. STARband clinicians utilize these technologies to improve clinical efficiencies and scan data accuracies, as well as to optimize clinical outcomes.



Clinical Documentation and Reports

Both the STARscanner and SmartSoc scanning systems offer detailed anthropometric reports that establish baseline measurements during repositioning and therapeutic treatments. If a cranial remolding orthosis is indicated, the patient is then scanned for the custom fabrication of a STARband, and follow-up and end-of-treatment scans are also collected. A comparative report is available to show the qualitative and quantitative corrections obtained by the orthotic treatment program.

Commitment to Quality Cranial Care Programs

The STARband team involves a clinical network of exceptional clinicians dedicated to the care of infants with deformational plagiocephaly and post-operative craniosynostosis. Qualifications for STARband clinicians include: experience in head shape clinics and cranial remolding programs; detailed knowledge of material sciences for fabrication and modification of custom orthoses; education in infant anatomy, physiology and functional development; experience in pediatric care programs; and the ability to communicate and engage with different family dynamics. Quality clinical outcomes depend upon the clinical skills of the STARband clinician.

1. Argenta L, David L & Thompson J. (2004). Clinical classification of positional plagiocephaly. The Journal of Craniofacial Surgery 15(3):368-372.
2. Bright Futures Well Child Visits. https://brightfutures.aap.org
3. Lam SK & Luerssen TG. (2016). New guidelines review evidence on PT, helmets for positional plagiocephaly. AAP News, October 2016, https://www.aappublicationsorg/news/2016/10/27/Plagiocephaly102016

STARBAND LOCATIONS

The STARband clinical network continues to grow as more and more orthotic clinicians specialize and focus their clinics in the management of infants with skull deformities.

A list of STARband clinics can be found at
www.starbandkids.com

or call
1 (800) 498-STAR

Partnering with experienced STARband specialists will enhance the referral process, improve communications within the medical team and family, streamline patient care procedures, and optimize clinical outcomes.

star band®
When nature needs a nudge™