Ear Molding for Newborn Babies With Ear Deformities

By Stephen Baker, MD, DDS, FS, FAAP



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What Is Ear Molding?

Ear abnormalities may lead to teasing in school, making children, and even adults, feel self conscious. Many ear abnormalities can be corrected with surgical procedures, but frequently these operations are denied by insurance companies because they are considered cosmetic. Even if the child elects to have a surgical correction, the operation usually requires that the child be 6-7 years of age, so that the ear cartilage has developed well enough to hold the sutures required for the operations. If the child is feeling self conscious about his or her ears prior to the age of surgical correction, it can be a tough time developmentally. If an infant is noted to have an ear shape abnormality and is seen within three weeks of birth, many of these ear anomalies can be corrected nonsurgically using a technique called ear molding. Traditionally, ear molding has been difficult to employ; however, recent advances in ear molding now make it easier to treat patients nonsurgically and painlessly.

Improvements in the design of prefabricated systems allow plastic surgeons to improve or correct many infant ear anomalies, including protruding ears, helical rim anomalies, Stahl's ear, lop ear and even cryptotia. This early nonsurgical intervention frequently eliminates the need for surgery, obtains an immediate correction and normalizes the ear through four to six appointments in the plastic surgeon's office. This early correction prevents the child from ever having to feel as though he or she is different from their peers.

When Should I See a Plastic Surgeon?

Studies have shown up to 53 percent of children are born with abnormalities of the external ear, and only 30 percent of these anomalies self-correct without treatment. Unfortunately, parents may not know if the ear abnormality will self correct until the infant is outside of the treatment window for ear molding. Therefore, it is recommended that infants beyond a week of age be referred for molding therapy within the first two to three weeks of life. It is possible to institute treatment up to 6-8 weeks of age, but outcomes may be compromised and treatment duration will be longer.

How Does It Work?

Ear molding works by reshaping the ear during the narrow window when circulating maternal estrogen remains at a high level in the child. If the cartilage is molded while maternal estrogen circulates within the newborn, it tends to retain its new shape as the maternal estrogen is metabolized. In most cases, nonsurgical molding treatment eliminates the need for surgery. Even if a child needs surgery when he or she is older, the surgery likely will be less complicated than if molding had not been initiated. Additionally, the ear will look better until surgical correction is an option at 7-8 years of age, reducing psychosocial problems.

Risks and Complications

It is important that parents have realistic expectations to avoid post-treatment disappointment. They are informed that molding will not result in a perfect ear, but likely will improve the shape and form to approximate a more normal ear shape. Risks and complications of ear molding include skin breakdown under a positioning retractor, skin irritation from the adhesive or failure to meet the parents' aesthetic goals. Skin sensitivity is rare, and any skin breakdown that may occur under a retractor heals well by repositioning the retractor to a healthy area of skin. Patients are seen one week after application to identify and treat any skin breakdown or irritation. After the first week of molding, pressure points under retractors usually subside.

Summary

Nonsurgical molding has been demonstrated to correct or improve many ear anomalies that previously would have been corrected surgically with few associated complications. Most insurance plans cover the procedure, so make sure your surgeon is in network with your insurance plan to reduce out-of-pocket costs. Because ear anomalies vary, it is recommended you see a surgeon who is knowledgeable in both surgical and nonsurgical molding techniques for the treatment of ear anomalies. Occasionally, molding is used to prepare the ear for future surgical correction, and it is important the surgeon be familiar with all aspects of ear reconstruction.

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