Microtia Quick Guide

About us
Our certified clinical anaplastologists custom-make your silicone ear prosthesis in our own laboratory ensuring high quality and individual design. No need to worry—we are gentle and nothing we do is painful. We treat our patients like family and make sure your time with us is stress free.

Our team partners with surgeons, therapists, and audiologists to provide the best possible prosthetic outcome. We work regularly with physicians and healthcare providers. When needed, we refer patients to the appropriate specialist.

What is microtia?
Microtia is a condition that is present at birth in which the external ear is underdeveloped. Microtia may affect one or both ears, but it most commonly occurs on the right side. Microtia is sometimes related to craniofacial syndromes such as Treacher Collins or Goldenhar. Microtia is often accompanied by atresia, or absence of the ear canal. When the ear canal is absent, there is usually conductive hearing loss on the affected side(s).

What are the treatment options for microtia?
We meet with many children, teenagers, and adults with microtia. We listen carefully to your concerns and questions and work with each patient to develop an individualized treatment plan.

Treatment options for microtia include going natural (no treatment), surgical reconstruction, and prosthetic restoration. We suggest that you discuss these options with an otolaryngologist (ear, nose and throat specialist), and/or a facial plastic reconstructive surgeon. You can also consult an otolaryngologist or audiologist (hearing specialist) to evaluate the hearing loss associated with atresia. As clinical anaplastologists we can answer your questions about prosthetic restoration of the ear.

Although every child is different, children who are at least 6 years old tend to be aware of their facial difference and can participate in the treatment process. We are happy to schedule a free consultation for a child of any age to discuss prosthetic treatment options.

Frequently asked questions...

How do I get started?
It’s never too early to meet with our clinical team for a new patient consultation and evaluation at no cost to you. Contact us as soon as you are ready to gather information. There is no obligation or pressure to proceed with treatment. It’s that simple!

What are the limitations of a prosthetic ear?
An ear prosthesis is made of silicone. It is not living tissue and must be removed each night for sleeping. It is important to clean the underlying skin and the prosthesis every day.

How often will my prosthesis need to be replaced?
A prosthesis lasts between 1 and 3 years depending on factors such as method of attachment, work and home environment, sun exposure, skin type, and hygiene. In most cases, we can use an archived mold to reproduce your prosthesis in only 1 or 2 appointments. In cases where there has been growth or changes in contour, we may need to remake your mold.

Will my prosthesis be covered by medical insurance?
Most reconstructive prostheses are covered by Medicare and health insurance plans. We are patient advocates and, with your permission, we will prior authorize the prosthesis and submit a claim on your behalf once the prosthesis is complete.

What if I’m disappointed with my surgically reconstructed ear?
If you are not satisfied with your reconstructed ear, we will listen to your concerns and discuss your options for prosthetic restoration.

What if both ears are affected by microtia?
We have considerable experience creating ear prostheses for individuals born with bilateral microtia. We have developed a systematic approach to determining size, location, and shape for bilateral ear prostheses to ensure a natural appearance.

Can I keep my little ear in place?
If you have an underdeveloped ear, you can decide whether to keep it in place or remove it. Designing a prosthesis that fits over an underdeveloped ear may compromise its form (see reverse for examples). During your initial consultation, we can share examples of similar patients to help you make a decision.
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How is an ear prosthesis made?

Our process requires 3 to 5 appointments which involve these steps:

- Make molds of your ear region using gentle materials.
- We work with the Milwaukee School of Engineering’s Rapid Prototyping Center to scan, mirror-image and 3-D print a model that we then convert to wax.
- Have you try on the wax model to ensure a natural contour and fit.

- Formulate 5 or more colors to match your unique skin-tones using health grade silicone.
- Once the sculpture is finalized, we make a durable mold which allows us to reproduce the prosthesis.
- Meticulously paint every skin detail using your color formulae in your mold.
- Delicately paint color details, such as freckling, onto the surface.
- Check the ear prosthesis for precise fit.
- Demonstrate wear and care instructions so that you can use your prosthesis with confidence.

Craniofacial bone-anchored implants
Small titanium screws are surgically implanted during an outpatient hospital procedure. During a 3-6 month healing period, the implants bond with bone to provide a stable foundation for your ear prosthesis. Once the healing period is complete, the prosthesis snaps onto the implants using clips or magnets.

You should discuss with your surgeon whether you are a candidate for implants. Together with your surgeon we identify the ideal location for 2 or 3 implants to ensure the best possible outcome for you.

Many patients choose to remove their little ear when implants are placed for a prosthesis:

Other patients choose to have implants placed and keep their little ear in place. This may result in a compromise in the form of the prosthesis:

Medical adhesive over microtia
(no surgery required)
A gentle medical adhesive is painted onto the prosthesis in the morning and cleaned at night when the prosthesis is removed. The prosthesis fits over the little ear like a glove, which may result in some compromises in form. Every ear is unique, so the degree of compromise varies.

Right implant retained prosthesis after removal of microtia.

We’d love to hear from you!

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