

Systematic Approach to the Two-stage Auricular Reconstruction

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Congenital auricular defects can be classified into: (1) lobule type microtia; (2) small concha type microtia; (3) concha type microtia; (4) anotia and (5-8) those with low hairline. The first stage operation is the fabrication and grafting of the three-dimensional costal cartilage framework (3-D frame). The second stage operation is the projection of the reconstructed auricle, symmetrically to the contralateral auricle. In both stages, chest wall deformity must be avoided.

Recent advancements in auricular reconstruction enabled us to treat complicated cases such as secondary auricular reconstruction, anotia (including traumatic amputation), low hairline cases, hemifacial microsomia and post-ENT surgery with consistent and more than satisfactory results. The key is to apply the systematic approach of using temporoparietal fascia flap (TPF), deep temporal flap (DTF) and ultra-delicate split-thickness scalp skin (UDSTS). The approach can be applied to all microtia cases.

TPF with UDSTS cover or DTF with UDSTS cover will both function like a skin flap with full vascularity. Thus, there is no postoperative contracture of the skin cover that leads to resorption of the grafted costal cartilage framework. The conventional method of skin grafting alone is contraindicated because it fails to maintain the contour of the auricle, due to vascular compromise, contracture and resorption.

For successful ear reconstruction, it is very important to provide good blood supply to the reconstructed auricle.

In Special Lecture (I), I explain the operative planning for primary reconstruction cases, such as lobule type, small concha type and concha type microtia.

In Special Lecture (II), I explain complicated cases, such as low hairline, secondary reconstruction, post-ENT, anotia, etc.