

## Modular component assembly feasible for ear reconstruction

January 4 2016

---



(HealthDay)—One porcine rib can be used to create an aesthetic and

durable framework for external ear repair using a modular component assembly (MCA) approach, according to a study published online Dec. 30 in *JAMA Facial Plastic Surgery*.

Jessica R. Gandy, from University of California at Irvine, and colleagues created an MCA method to decrease the total amount of porcine rib needed for auricular [scaffold](#) construction. Ten surgeons reviewed the MCA-built scaffold to evaluate aesthetics, stability, and clinical feasibility.

The researchers fashioned an auricular framework with projection and curvature from one rib. The reviewing surgeons indicated on the survey that the MCA scaffold would meet minimal aesthetic and anatomic acceptability. When the region of the helix and antihelix of the scaffold were embedded under a covering, scores were significant higher on the assessment survey than those seen for an embedded alloplast implant ( $P = 0.007$ ). Cartilage prepared with electromechanical reshaping was also viable.

"This cartilage-sparing MCA approach may be an alternative to classic techniques," the authors write.

Two authors retain [intellectual property rights](#) and receive royalties for technology employed in the study.

**More information:** [Abstract](#)  
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2015 [HealthDay](#). All rights reserved.

Citation: Modular component assembly feasible for ear reconstruction (2016, January 4)  
retrieved 12 May 2024 from <https://medicalxpress.com/news/2016-01-modular-component->

[feasible-ear-reconstruction.html](#)

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.