

5th Global Summit and Expo on

HEAD, NECK AND PLASTIC SURGERY

June 19-20, 2017 Philadelphia, USA

Nasal unit transplantation: A cadaveric anatomical feasibility study

Amir H Dorafshar¹, Gerhard S Munding¹, Brent Robinson², Sami Tuffaha¹, Gerald Brandacher¹, Patrick Byrne¹ and Robert L Walton²¹Johns Hopkins Hospital, USA²Saint Joseph Hospital, USA

Background: The science and technical acumen in the field of vascularized composite allotransplantation (VCA) has progressed rapidly over the last 15 years and transplantation of specialized units of the face, such as the nose, appears possible. No study to date has evaluated the technical feasibility of isolated nasal unit transplantation (NUT). In this study, we explore the anatomy and technical specifics of nasal unit transplantation.

Methods: 4 fresh cadaver heads were studied. Bilateral vascular pedicle dissections were performed in each cadaver. The facial artery was cannulated and injected with food dye under physiologic pressure in 2 cadavers and with lead oxide mixture 2 cadavers to evaluate perfusion territories supplied by each vascular pedicle.

Results: The facial artery and vein were found to be adequate pedicles for NUT transplantation. Divergent courses of the vein and artery were consistently identified, which made for a bulky pedicle with necessary inclusion of large amounts of subcutaneous tissue. In all cases, the artery remained superficial, while the vein coursed in a deeper plane and demonstrated consistent anastomoses with the superior transverse orbital arcade. While zinc oxide injection of the facial artery demonstrated filling of the nasal vasculature across the midline, dye perfusion studies suggested that unilateral arterial inflow may be insufficient to perfuse contralateral NUT components. Discrepancies in these two studies underscore the limitations of non-dynamic assessment of nutritive perfusion.

Conclusion: NUT based on the facial artery and facial vein is technically feasible. Angiosome evaluation suggests that bilateral pedicle anastomoses may be required to ensure optimal perfusion.

adorafs1@jhmi.edu

Complications and failures of 1000 cochlear implantations at Apollo Health City, India

Yeshwant Lal Ravi Jadhav, Vinaya Kumar, Srinivas G, Rambabu K, Jaswindersingh S, Vinay Kumar and Srikanth I

Apollo Hospital, India

Objective: To evaluate cochlear implant complications and failures to determine possible causes and discuss medical and surgical management.

Method: Retrospective study of 1000 cochlear implants for a period of 1994-2016 in a tertiary care center was done. The sample consisted of 930 pre-lingual and 70 post lingual patients, 593 male and 407 female, 920 children below 18 years and 80 adults above 18 years, 916 unilateral and 42 bilateral subjects, 764 normal anatomy and 246 abnormal ears were taken.

Results: The overall rate of complications was 6.0% (60 of 1000), with 43 (4.53%) minor complications and 17 (1.78%) major complications; all were treated medically and surgically.

Conclusions: Cochlear implantation is a safe technique with a relatively low complication rate; however, certain complications may require specific attention to prevent or correct them. It is important to keep studying the causes of such complications and find possible solutions that can lead to minimizing them.

yl.ravi@yahoo.com