

ENSURING ETHICAL APPROACHES TO VASCULARIZED COMPOSITE ALLOTRANSPLANTATION

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Disclosure Statement

I have no conflicts of interest to disclose.

Presentation Overview

- 1) Ethics of VCA vs. Solid Organ Transplantation (SOT)
- 2) Goals of Vascularized Composite Allotransplantation (VCA)
- 3) Ethical Approaches to Surgical Innovation: Whole-Eye Transplantation
- 4) Shifting Toward Equity

ETHICS OF VCA VS. SOT

Ethical Principles in Transplantation

- Organs as **Scarce Resource**
- Balancing **Utility** and **Equity**



SOT / VCA Timeline

1st SOT
1954



1st VCA
1999



2022

SOT: ~130K/yr
VCA:<300



MedicalJane

Ethically Relevant Differences: SOT vs. VCA

- Life Saving vs. Life Enhancing
- Standard of Care vs. Experimental
- Degree of Variation Among and Across Types

Variation Across VCA Types as of 2023

VCA TYPE	VOLUME	1 ST SUCCESS
Hand	< 150	1999
Face	< 50	2005
Uterus	> 100	2013
Penis	4	2014

Informed Consent for Hand and Face Transplant

- Autonomy
 - Decisional capacity
 - Severity of injury/condition
 - Availability of alternative treatment options
- Informational Needs and Limited Outcomes Data
- Informed Consent for Research vs. Clinical Care
- Role of Shared Decision-Making

GOALS OF VCA

Purpose of VCA: To Improve Quality of Life

World Health Organization (WHO) defines QoL as:

“an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad-ranging concept affected in a complex way by the person’s physical health, psychological state, personal beliefs, social relationships, and their relationship to salient features of their environment.”

Quality of Life and Lived Experience

AMA Journal of Ethics[®]

November 2019, Volume 21, Number 11: E980-987

MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

How to Integrate Lived Experience Into Quality-of-Life Assessment in Patients Considering Facial Transplantation

Laura L. Kimberly, MSW, MBE, Allyson R. Alfonso, Rami S. Kantar, MD, Elie P. Ramly, MD, Arthur L. Caplan, PhD, and Eduardo D. Rodriguez, MD, DDS

Which Facets of Quality of Life Matter to VCA Recipients?

☐ Perceptions of Quality of Life among Face Transplant Recipients: A Qualitative Content Analysis

Greenfield, Jason A.; Kimberly, Laura L.; Berman, Zoe P.; [More](#)

Plastic and Reconstructive Surgery - Global Open. 8(8):e2956, August 2020.

 Abstract  Favorite  PDF  Permissions

OPEN

UNITED STATES



FT Quality of Life Research: Perennial Challenge

Purpose: To understand the impact of facial transplantation (FT) on quality of life (QoL) for FT recipients.

Why?

To enhance QoL assessment and outcomes for FT recipients

Alternative Strategy

Knowledge Gap: FT Recipients' Perspectives on QoL

Opportunity: Publicly Available Transcripts of Media Interviews with FT Recipients

ETHICAL SURGICAL INNOVATION: WHOLE-EYE TRANSPLANTATION







Pre-Injury



Pre-Transplant



10 Months Post-Transplant



American Journal of Bioethics

Target Article

First-in-Human Whole-Eye Transplantation: Ensuring an Ethical Approach to Surgical Innovation

Matteo Laspro , Erika Thys, Bachar Chaya, Eduardo D. Rodriguez & Laura L. Kimberly  

Published online: 05 Jan 2024

“ Cite this article  <https://doi.org/10.1080/15265161.2023.2296407>



Ethical Issues in First-in-Human WET

- Balancing Risks and Benefits – Combining FT-WET
- Psychosocial Considerations – Identity, Technology, Social Support, Media Exposure
- Transparency – Pros and Cons

Ethics of Surgical Innovation

- Surgical Learning Curve
- Managing Optimism Bias
- Optimal Care for WET Recipients
- Demonstrating Readiness

SHIFTING TOWARD EQUITY

Some Equity and Justice Questions in VCA

- Who has access to VCA? Who doesn't? Who should have access?
- What factors influence disparities in VCA access and outcomes?
- How do we center patients' perspectives in VCA, including shared decision-making?
- How can individuals' lived experience of health and illness be incorporated into standardized VCA measures?

Navigating Geographic Distance and/or Institutional Changes

- Monitoring for graft rejection
- Delegating long-term follow-up to local providers
- Implications for quality/continuity of care
- Relationship with care team
- Financial and logistical considerations
- Care team members and recipient must be able to relocate

Journal of Plastic, Reconstructive & Aesthetic Surgery (2018) 71, 1383–1391



Review

Long-distance care of face transplant recipients in the United States



William J. Rifkin¹, Amit Manjunath¹, Laura L. Kimberly, Natalie M. Plana, Rami S. Kantar, G. Leslie Bernstein, J. Rodrigo Diaz-Siso, Eduardo D. Rodriguez*

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Privacy for VCA Recipients and Families

- Very challenging for face transplant
 - Public interest
 - Institutional incentives to publicize
- Stances on expectations for privacy have been program-specific
- For hand transplant, interest early on but privacy easier to assure now

Further Ethical Considerations in VCA

- Shifting toward equity
 - Standardizing VCA measures
 - Addressing disparities in access and outcomes
 - Securing a sustainable funding model

FUTURE DIRECTIONS

Conclusion and Future Directions

- One size does NOT fit all in VCA
- Opportunity to address equity proactively
 - Learn from SOT
 - Empirical evidence: cross-institutional collaboration, multistakeholder involvement

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THANK YOU



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