

Subtotal Calvarium Reconstruction Following Necrotizing Soft Tissue Infection

Alexandria J. Lichtl MD,¹
Sara Yang MD,¹ Jason Lee MD, PhD¹ Mark K. Wax MD¹

¹Department of Otolaryngology-Head and Neck Surgery, Oregon Health & Science University, Portland, OR

INTRODUCTION

- Necrotizing soft tissue infections (NSTIs) are rare and rapidly progressive
- Only 2-10% of NSTIs affect the head and neck¹
- Mainstay of treatment for NSTI is surgical debridement, which can result in large defects requiring free tissue transfer^{2,3}
- When the defect is significant, one free flap may not provide enough coverage⁴

INITIAL CARE

Post-debridement defect measuring 28x25 cm



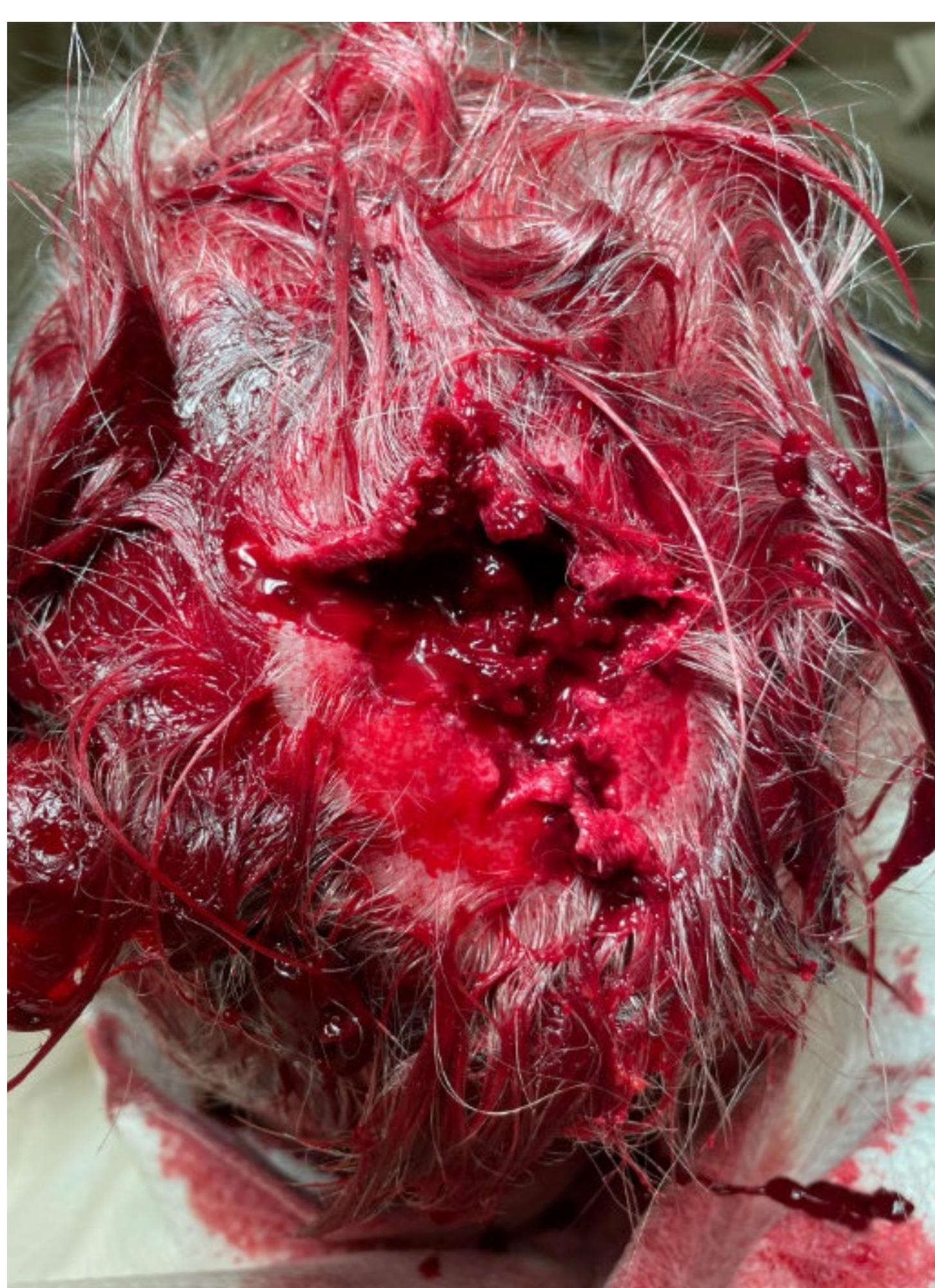
COMPLICATIONS

Soft tissue infection at flap edge



CASE PRESENTATION

- 75 year old female developed NSTI involving majority of the scalp after a fall with laceration

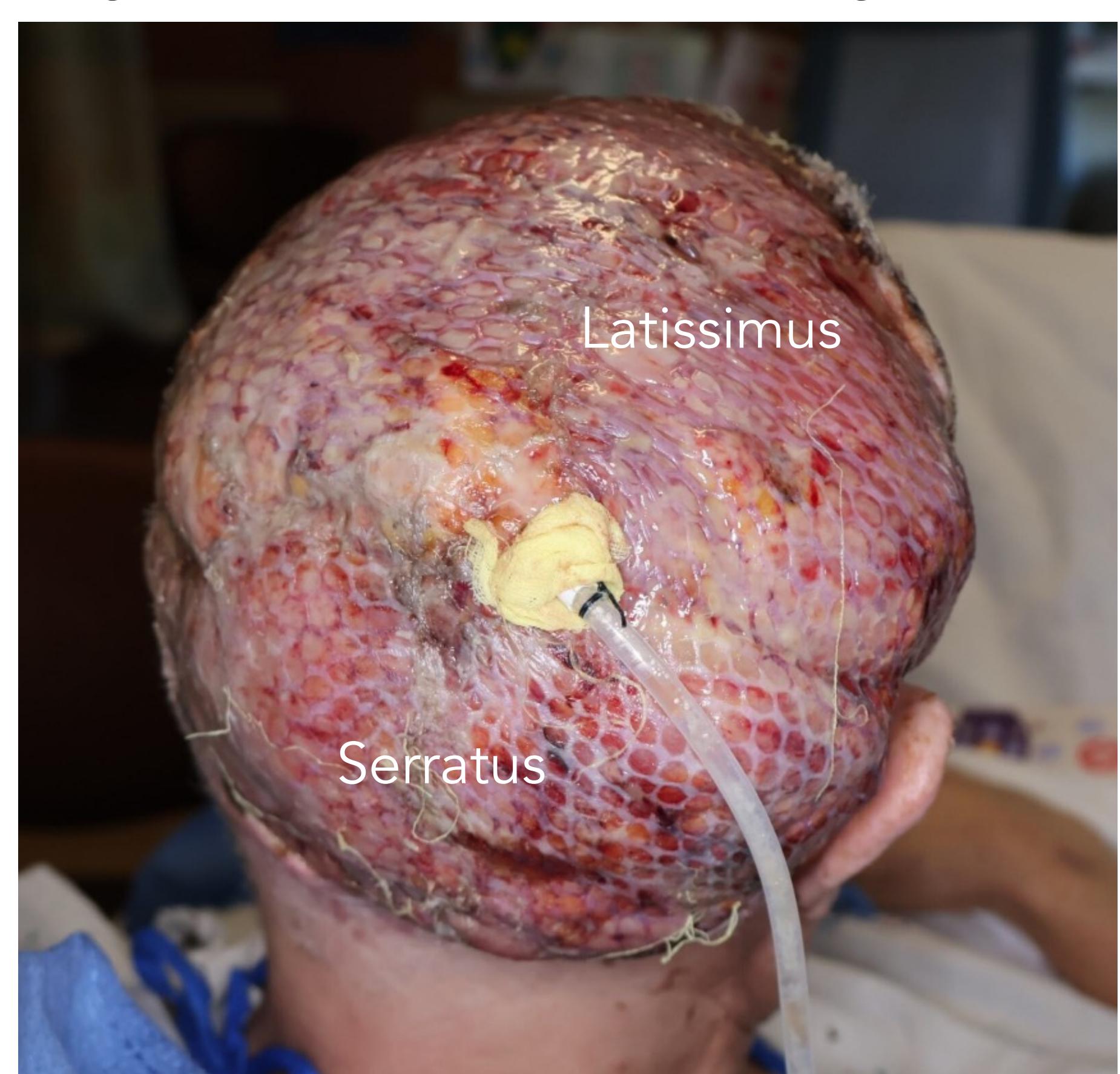


- Treatment
 - Serial debridement
 - IV antibiotics
 - Wound vac placement x 10 days
 - Latissimus dorsi/serratus anterior chimeric free flap based on subscapular system
 - Split thickness skin graft

FREE TISSUE TRANSFER

Technique

- Cutting burr used to debride outer skull cortex
- Serratus muscle covered occipital region and latissimus rest of scalp
- Anastomosis to superficial temporal vessels
- Coverage with slit thickness skin graft



CASE RESOLUTION

Status post split thickness skin graft, healed



A subscapular system free flap can provide multiple tissue options pedicled on one vessel to achieve wide surface area coverage following necrotizing soft tissue infection of the scalp

CONTACT

Alexandria Lichtl
Oregon Health & Science University
lichtl@ohsu.edu

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