

# The Fractionating of Form and Function – A Case Study Exploring the Challenges of Comprehensive Facial Reconstruction

Dr. Michael Rooke BMBS, B.A.(Hons)<sup>1</sup>, Prof. John Greenwood BSc(Hons), MBChB, MD, FRCS(Eng), FRCS(plast), FRACS<sup>2</sup>, Mr. Marcus Wagstaff MBBS, PhD, FRACS<sup>3</sup>

1 Burns Unit, Royal Adelaide Hospital, North Tce, Adelaide SA 5000, rooke.michael@gmail.com

2 Burns Unit, Royal Adelaide Hospital, North Tce, Adelaide SA 5000, john.greenwood@health.sa.gov.au

3 Department of Plastic and Reconstructive Surgery, Royal Adelaide Hospital, North Tce, Adelaide SA 5000, m.wagstaff@doctors.co.uk

Although facial burns are commonly encountered at all Burn Centres, rare are injuries so extensive as to require complete facial reconstruction. Here presented is the case of Mr. RR., a 31 y.o. male who sustained full-thickness burns totalling 39% TBSA, including the face, during a house fire which caused three other fatalities. His initial management included early excision and grafting of his corporeal wounds, excision of facial eschar and subsequent full dental clearance, necessitated by an episode of dental sepsis.

Reconstruction followed an ordered sequence of procedures; these started three months post-injury once he had undergone extensive physical and psychological rehabilitation. His deficits were multiple: bilateral ectropion, absent dentition, neck contractures and contractures of the oral commissure leading to microstomia and loss of oral continence. He also had significant cosmetic deficits: loss of the pinnae and external nose, loss of lip projection and loss of all hair-bearing skin. Given limited access to native tissue, dermal substitutes were utilised in order to minimise facial contractures following subsequent grafting. Local flaps were also used, along with scavenged cartilage to restore the external nose and restore both projection and patency to it. At the time of submission he was also planned to undergo further work: insertion of dental implants and upper lip reconstruction.

Using this case study the challenges of comprehensive facial reconstruction are illustrated and potential solutions discussed; namely how to order procedures, what to do when native tissue is in limited supply and how to utilise Allied Health to best prepare a patient, both physically and mentally, for extensive facial surgery.

## Key Words

Reconstruction, Facial Burns

## Nominated Stream for Oral Presentations

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Nursing

Allied Health

Scientific

## Nominated Stream for Poster Presentations

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