Principles of Facial Reconstruction After Mohs Surgery

Objectives

- Identify important functional anatomy and aesthetic units of the face.
- Describe techniques used in facial reconstruction.
- Discuss postoperative care and complications.
- Participate in an interactive discussion on caring for patients with skin cancer of the face.

Mohs Micrographic Surgery

Resources


Objectives

- Identify important functional anatomy and aesthetic units of the face.

Functional Anatomy

<table>
<thead>
<tr>
<th>Anatomical Unit</th>
<th>Function</th>
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<tbody>
<tr>
<td>Eyelids</td>
<td>Corneal Protection</td>
</tr>
<tr>
<td>Lacrimal System</td>
<td>Lubrication and Drainage</td>
</tr>
<tr>
<td>External Nose</td>
<td>Nasal Airway</td>
</tr>
<tr>
<td>Lips</td>
<td>Speech and Swallowing</td>
</tr>
<tr>
<td>External Ear</td>
<td>Sound Conduction</td>
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Cosmetic Units and Subunits

Eye Subunits
- Upper Eyelid
- Lower Eyelid
- Medial Canthus
- Lateral Canthus

Nasal Subunits
- Dorsum
- Sidewall
- Tip
- Ala
- Columella
- Facet/Soft Triangle

Cheek Subunits
- Medial
- Zygomatic
- Buccal
- Lateral

Ear Subunits
- Helix
- Antihelix
- Scapha
- Triangular Fossa
- Concha
- Lobe

Lip and Chin Subunits
- Lateral Upper Lip
- Philtrum
- Vermillion
- Lower Lip
- Chin

Sherris & Lamabee, Principles of Facial Reconstruction
Objectives

- Describe techniques used in facial reconstruction.

Reconstructive Techniques

Reconstructive Ladder

- Free Flaps
- Regional Tissue Flaps
- Local Tissue Flaps
- Tissue Expansion
- Skin Grafting
- Primary Closure
- Secondary Intention

Secondary Intention

Diagrammatic representation of the stages in healing by secondary intention.

[Image: pathol.med.stu.edu.cn]

Primary Closure

Relaxed Skin Tension Lines

Lines of Maximal Extensibility

[Image: sherris-larrabee-principles-of-facial-reconstruction]
Reconstructive Techniques

Local Tissue Flap

Sherris & Lamabee. Principles of Facial Reconstruction

Objectives

• Discuss postoperative care and complications.
### Postoperative Care and Complications

#### Reconstructive Ladder
- Free Flaps
- Regional Tissue Flaps
- Local Tissue Flaps
- Tissue Expansion
- Skin Grafting
- Primary Closure
- Secondary Intention

#### Secondary Intention
- Extended Healing Time
- Scar Contracture
- Distortion of Anatomy

#### Primary Closure
- Excessive Tension
- Scarring
- Wound Separation
- Distortion of Anatomy

#### Skin Graft
- Split Thickness – Scalp
- Full Thickness – Facial Units
- Revascularization – 1 Week
- Minimize Shearing Forces
- Bolster Dressing x 1 Week

#### Skin Graft Complications
- Seroma / Hematoma
- Graft Failure
- Contraction
- Pin-cushioning
- Poor color match
Postoperative Care and Complications

Local Tissue Flaps
Dermal Blood Supply
• Incision Care
• Avoid Tension

Complications
• “Dog-ear” Deformity
• Inadequate Blood Supply
• Graft Necrosis
• Healing by Secondary Intention

Pedicled Flaps
Staged Procedure
1. Flap Raised & Transferred
2. Pedicle Divided & Flap Inset
• Revascularization ~ 3 Weeks
• Pedicle Kept Clean
• Avoid Shearing Forces
• Avoid Tension

Complications
• Donor Site Reconstruction
• Distortion of Anatomy
• Graft Failure

Objectives
• Participate in an interactive discussion on caring for patients with skin cancer of the face.

Discussion
How can we best care for patients with skin cancer of the face?
Discussion

**Multidisciplinary Team:**

- What roles do nurses play in the care of these patients?
- How can nurses lead improved care for these patients?