THE USE OF TONGUE FLAPS IN ORAL RECONSTRUCTION

Department of Oral and Maxillofacial Surgery, Thomas Jefferson University Hospital

HISTORY
- Described for use in introral reconstruction of a soft palate defect (Kloop and Schurter 1956)
- Variants of flap design for temporary or definitive coverage of small defects (Conley 1966)
- Correction of lip deformities (Guerrero-Santos) and reconstruction for treatment of electrical burns (Ortiz-Monasterio)
- Closure of palatal fistulas (Jackson 1972)

ADVANTAGES
- Use of adjacent tissue
- Excellent blood supply
- Low morbidity
- Reinnervation of the adjacent host tissue

FLAP DESIGN
- Anterior based flap
- Posterior based flap
- Lateral flap
- Median flap
- Ventral surface flap
- Central island flap

CONSIDERATIONS
- Location and size of defect
- Location and direction of blood supply in the tongue
- Prevention of tension and distortion of flap

BASICS
- Base of flap should measure 2.5 to 3.0 cm wide
- Length of flap should be sufficient to avoid tension on the pedicle from the motion of the tongue
- Length may be extended 3 to 6 cm

FISTULA CLOSURE
- Especially useful in end stage palatal fistulas secondary to cleft palate
- Patients often have scar tissue following multiple surgeries

CLINICAL APPLICATIONS
- Reconstruction following resection of oral structures
- Resurfacing of oral defects
- Fistula closure
- Floor of mouth
- Buccal mucosa

CASE REPORT
Pt is a 53 y.o. male with h/o congenital cleft lip and palate, s/p numerous surgical procedures, now with a residual oronasal fistula.

"Raising the Flap"

Once the tongue flap is raised, it may be advanced by dividing the muscle on the undersurface of the flap with short incisions in a longitudinal direction

DEBULKING
- Debunking may be necessary prior to dental prosthesis
- Bulky palatal tissue may impair speech
- Advisable to wait three months after the original pedicle has been separated

BIBLIOGRAPHY