



# Oro-Antral Fistulae

Oro-antral fistula represent a surgical challenge



# Etiology

- Extraction & instrumentation around upper teeth
- Facial trauma
- Infection as osteomyelitis and syphilitic gumma
- Surgery in the upper jaw
  - Large cysts
  - Tumors
  - Facial fracture
- Bizarre causes

# Signs & Symptoms of OAF

## o Recent OAF

- Regurgitation of fluid from the nose
- Inability to blow out the cheek
- Unilateral nasal epistaxis
- Alteration in vocal sounds
- When small test for communication
  - Nose blowing test
  - Silver probe
  - Suction test





- **Late (Old) OAF**

- Unilateral nasal discharge
- Bad taste and smell
- Acute or chronic sinusitis
- Sinus polyps
- Plowing test produce pus

# Management of OAF

**Recent OAF**

**< 24 Hours**

**> 24 Hours**

**Long Standing**

No infection  
No epithelialization

No infection  
Epithelialization

Infection  
Epithelialization

Infection  
Epithelialization  
Tract Epithel

Refresh edges

Refresh edges  
Control Infection

Refresh edges  
Control Infection  
Refresh tract

**Surgical closure**



# Surgical Closure of OAF

## ○ Success

- Control infection
- Good designed flap
- Good suturing
- Good drainage

## ○ Failure

- Infection
- Suturing under tension
- Inadequate edge refreshment
- Depletating conditions



- **Requirement of Flap**

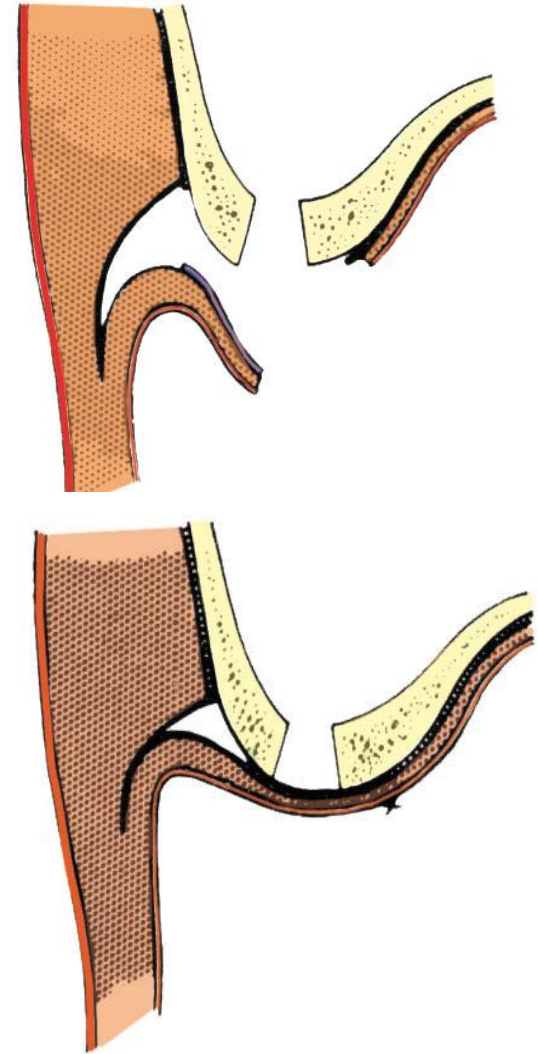
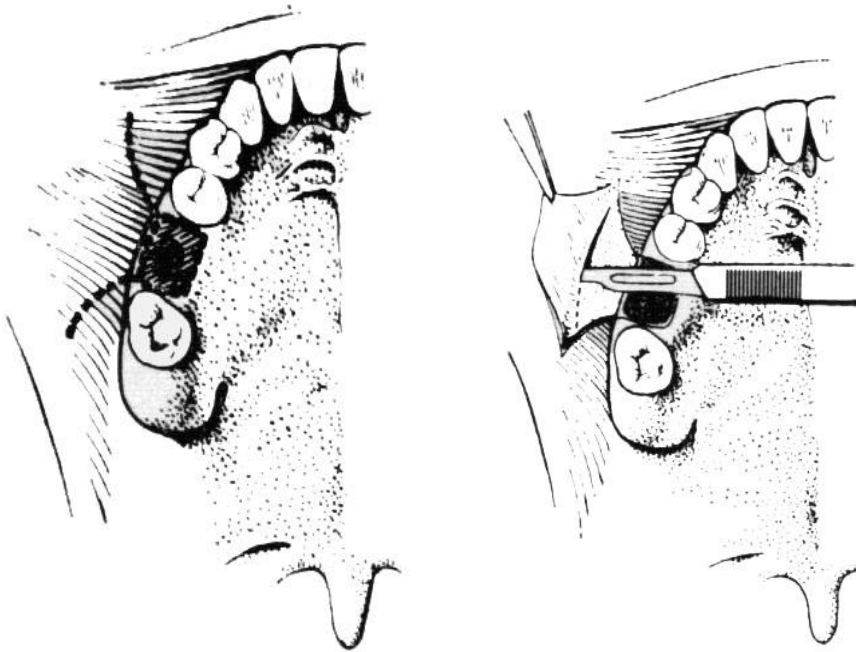
- Good blood supply
- Cover defect without tension
- Suture line on sound bone
- Adjacent teeth covered by bone

- **Post-operative Care**

- No smoking
- No nose blowing
- Antibiotics & analgesics
- Nasal antrostomy

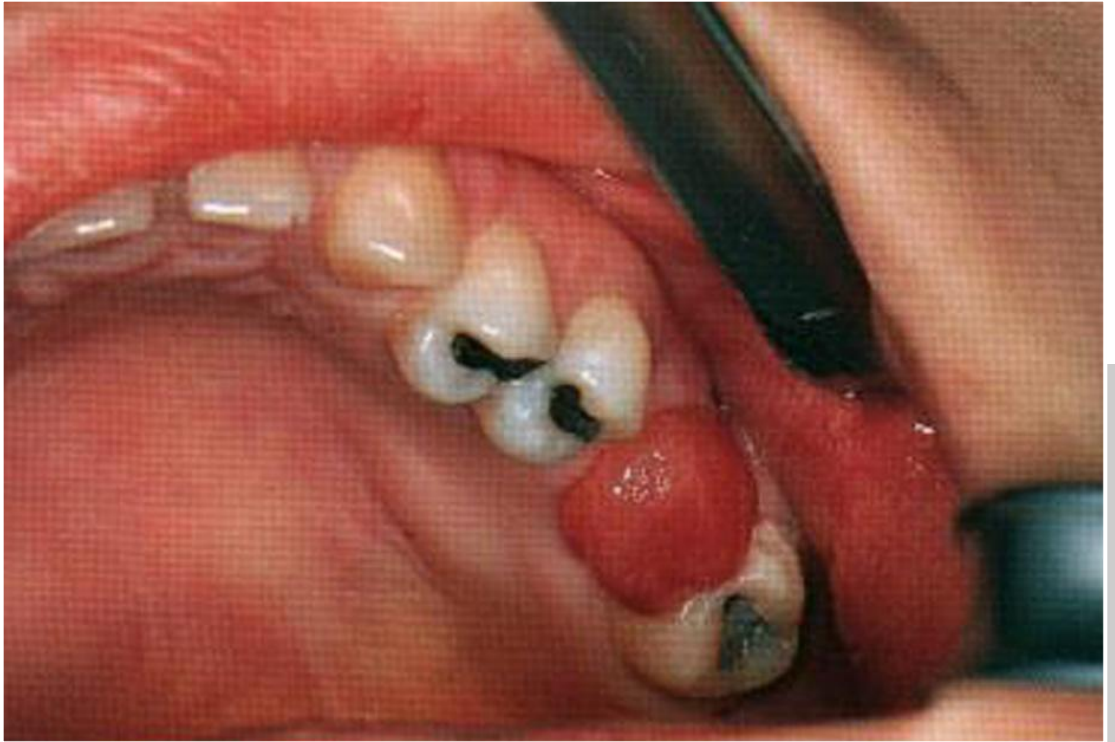
# Surgical Techniques for Closure of OAF

## 1. Buccal Advancement Flap

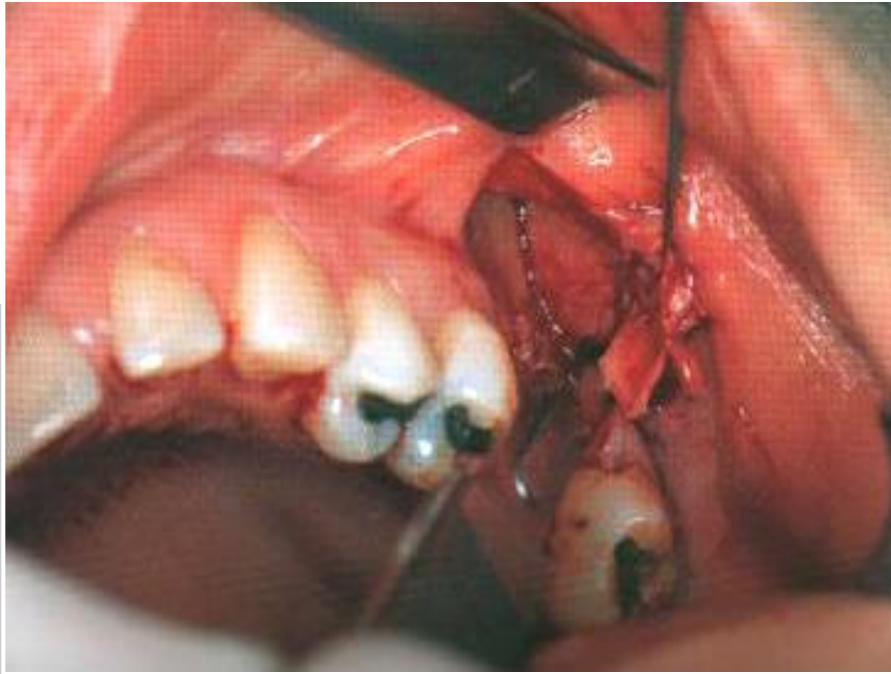


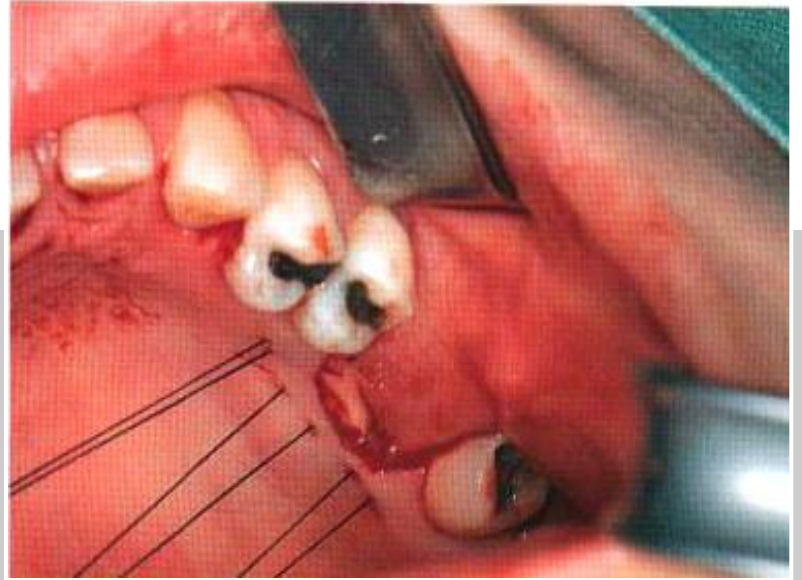
- Suitable for patients with partial dentures the fit of which may be affected by palatal flap
- May cause obliteration of the buccal sulcus



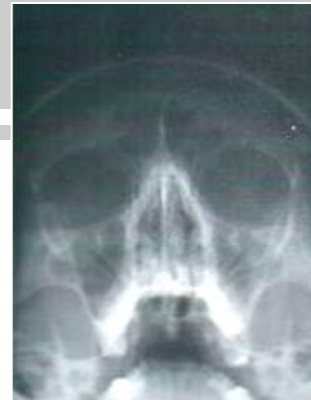










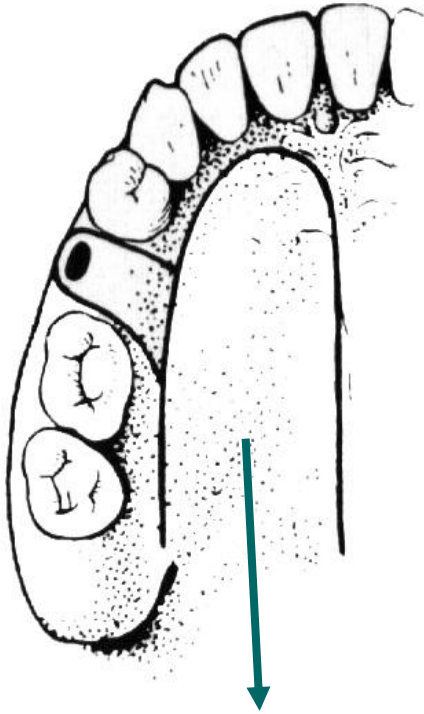




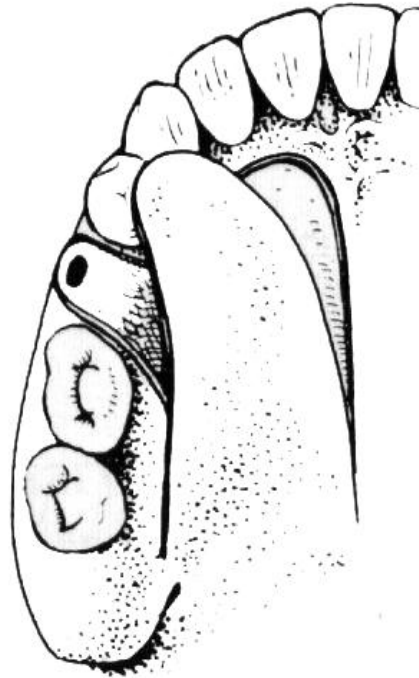
## Factors which Complicate Closure of OAF

- Duration of the OAF
- When the root of the adjacent tooth form a wall of the fistula
- Size of the bony defect
- The presence of infection

## 2. Palatal Pedicle Flap



Palatal mucosa is thicker, firmer and has better blood supply



Some deformities in the palatal mucosa may occur

Raw palatal area covered by surgical pack

