

# NASAL POLYPI



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# NASAL POLYPI

- DEFINITION AND TYPES
- AETIOLOGY
- ASSOCIATED CONDITIONS
- SYMPTOMS AND SIGNS
- HISTOPATHOLOGY
- DIAGNOSIS
- MANAGEMENT



# DEFINITIONS AND TYPES

**NON-NEOPLASTIC MASSES OF  
OEDEMATOUS NASAL OR SINUS  
MUCOSA CHARACTERIZED BY GROSS  
EXTRACELLULAR SUBMUCOSAL  
EDEMA**

**OR**

**FIBROEDEMATOUS INFILTRATION OF  
SUB-EPITHELIAL TISSUE**

## **TYPES**

- **ANTROCHOANAL**
- **ETHMOIDAL**



# ETHMOID POLYPS

## ETHMOID SINUS

- **COMPLEX LABYRINTH ENCLOSING 3-21 CELLS. POLYPS ARISE FROM THE LINING OF THESE CELLS AND PROLAPSE INTO MIDDLE MEATUS**
- **MAY ALSO ARISE FROM UNCINATE PROCESS, BULLA ETHMOIDALIS, SINUS OSTIA AND MIDDLE TURBINATE**



# AETIOLOGY

- NOT CLEARLY UNDERSTOOD
- **ALLERGY** MAIN IMPLICATED FACTOR  
(90% EOSINOPHILIA, ASTHMA,  
ALLERGIC SYMPTOMS)
- OTHER THEORIES INCLUDE  
**BERNOULLI EFFECT AND INFECTIONS**

# **CONDITIONS ASSOCIATED WITH POLYPS**

- **ASTHMA**
  - 20-25% HAVE COEXISTING POLYPS AND ASTHMA
- **ASPIRIN HYPERSENSITIVITY**
  - 8% HAVE COEXISTING ASTHMA, POLYPS AND ASPIRIN SENSITIVITY (SAMTERS TRIAD)
- **CYSTIC FIBROSIS**
- **KARTAGENERS SYNDROME**
- **YOUNGS SYNDROME**
- **CHURG-STRAUSS SYNDROME**
- **NASAL MASTOCYTOSIS**

# CLINICAL FEATURES

## *SYMPTOMS*

- MOSTLY SEEN IN ADULTS  
IF <2 YEARS, EXCLUDE MENINGOCOELE  
IF <10 YEARS, EXCLUDE CYSTIC FIBROSIS  
(RARE)
- SNEEZING/WATERY NASAL DISCHARGE
- NASAL OBSTRUCTION OR STUFFINESS  
(BILATERAL)
- HYPOSMIA/ANOSMIA
- POSTNASAL DRIP
- HYPONASAL VOICE

# CLINICAL FEATURES

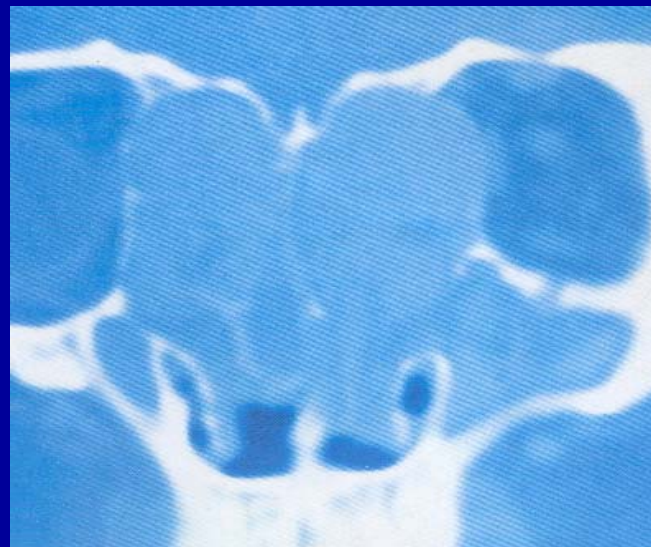
## ***SIGNS***

- SMOOTH, GLISTENING, PALE MASSES, NOT SENSITIVE TO PROBING, DO NOT BLEED
- MULTIPLE AND BILATERAL
- FLARING OF ALAR CARTILAGES, BROADENING OF NOSE AND INCREASED INTERCANTHAL DISTANCE





# POLYPS-ENDOSCOPIC AND RADIOLOGIC VIEW



# **PATHOLOGY**

- **LINED BY RESPIRATORY EPITHELIUM  
BUT MAY SHOW SQUAMOUS  
METAPLASIA**
- **SUBMUCOSA GROSSLY  
OEDEMATOUS**
- **STRIKING EOSINOPHILIA**

# DIAGNOSIS

- **DIAGNOSIS MAINLY CLINICAL**
- **ROUTINE WORK-UP**
  - **HAEMATOLOGICAL, BIOCHEMICAL, ECG/CXR**
- **RADIOLOGY**
  - **X RAY PNS**
  - **CT PNS (INV OF CHOICE)**
    - FULL EXTENT APPRECIATED
    - MALIGNANCY CAN BE EXCLUDED
    - SINUS ANATOMY BETTER APPRECIATED



*Polyps*

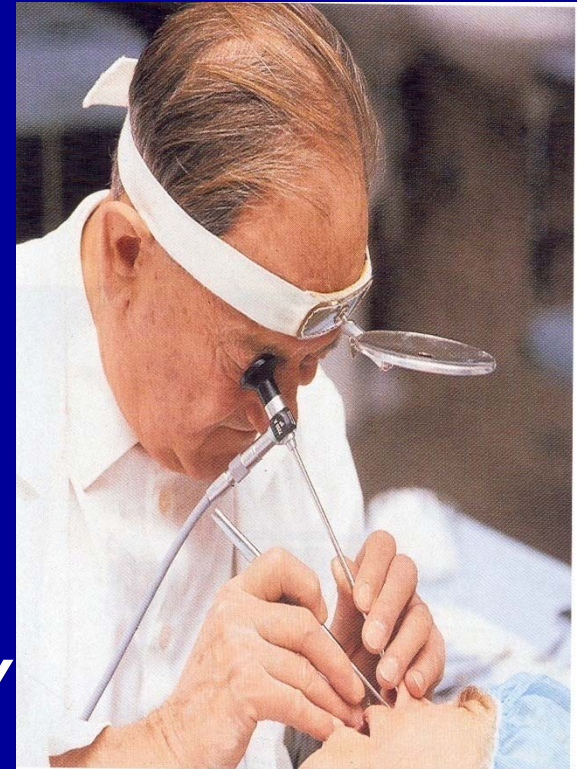
# TREATMENT

## MEDICAL

- ANTIHISTAMINES,
- STEROID SPRAYS
- ORAL STEROIDS

## SURGICAL

- SIMPLE POLYPECTOMY
- INTRANASAL ETHMOIDECTOMY
- EXTERNAL ETHMOIDECTOMY
- FESS



# ANTROCHOANAL POLYP

- DISTINCT ENTITY FROM ETHMOIDAL POLYPS
- ARISE FROM FLOOR AND LATERAL WALL OF MAXILLARY ANTRUM

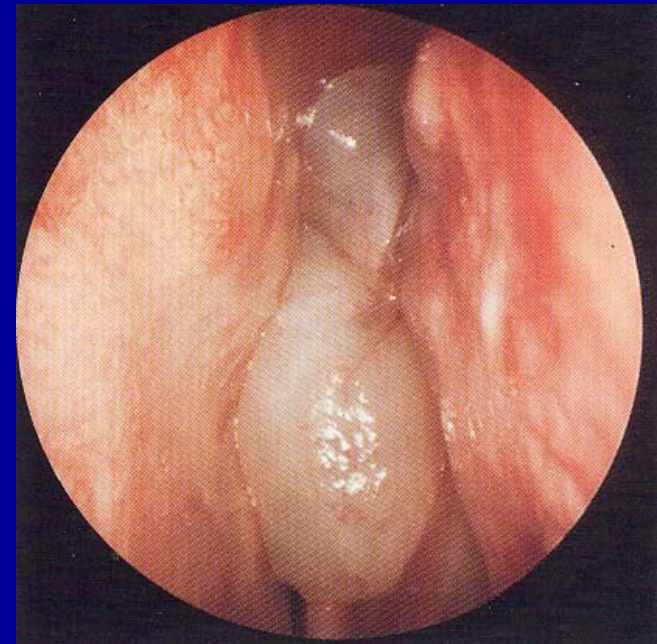
## AETIOLOGY

- EXACT CAUSE NOT KNOWN-  
**NASAL ALLERGY WITH INFECTION IS IMPLICATED**

# PATHOLOGY

- POLYPS START IN THE MAXILLARY SINUS AND GROW OUT OF THE OSTIUM OR ACCESSORY OSTIUM
- USUALLY GROW POSTERIORLY INTO THE CHOANA AND FURTHER INTO THE OROPHARYNX
- SEEN AS SINGLE UNILATERAL PALE GREY MASSES IN THE NOSE OR IN THE CHOANAE/OROPHARYNX

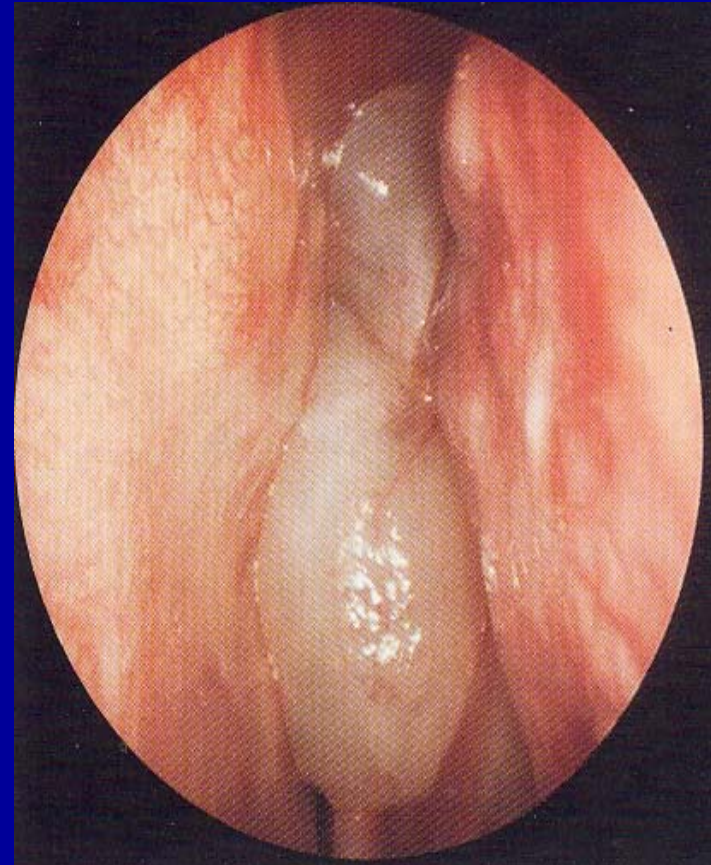
*HISTOLOGICALLY SIMILAR TO ETHMOIDAL POLYPS BUT THERE IS NO EOSINOPHILIA*



# CLINICAL FEATURES

## *SYMPTOMS*

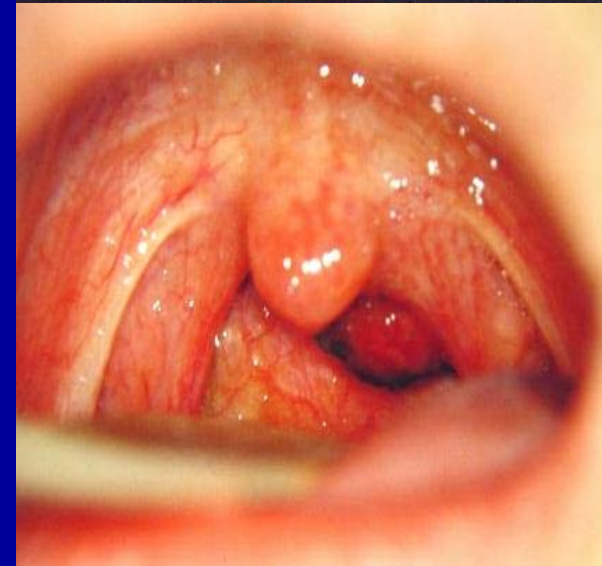
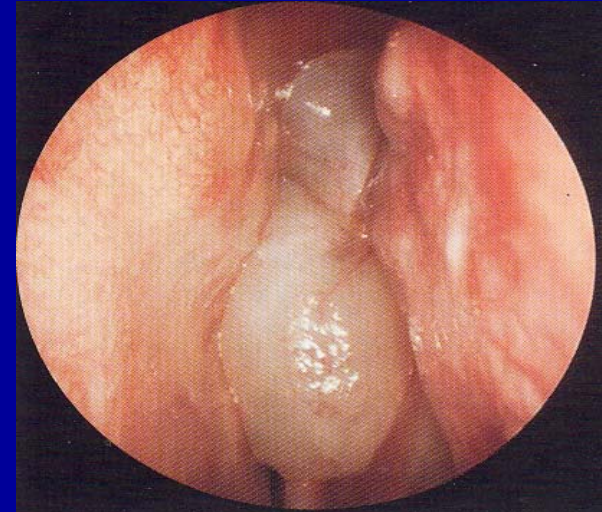
- USUALLY OCCURS IN YOUNGER CHILDREN
- UNILATERAL NASAL OBSTRUCTION
- MAY BE BILATERAL IF OBSTRUCTS THE CHOANA
- HYPONASAL VOICE
- NASAL DISCHARGE



# CLINICAL FEATURES

## ***SIGNS***

- **SINGLE UNILATERAL GREYISH SMOOTH MASS**
- **INSENSITIVE TO PROBING AND DOES NOT BLEED ON TOUCH**
- **BETTER SEEN ON POSTERIOR RHINOSCOPY AS A GLOBULAR MASS IN THE CHOANA OR HANGING DOWN INTO THE OROPHARYNX**

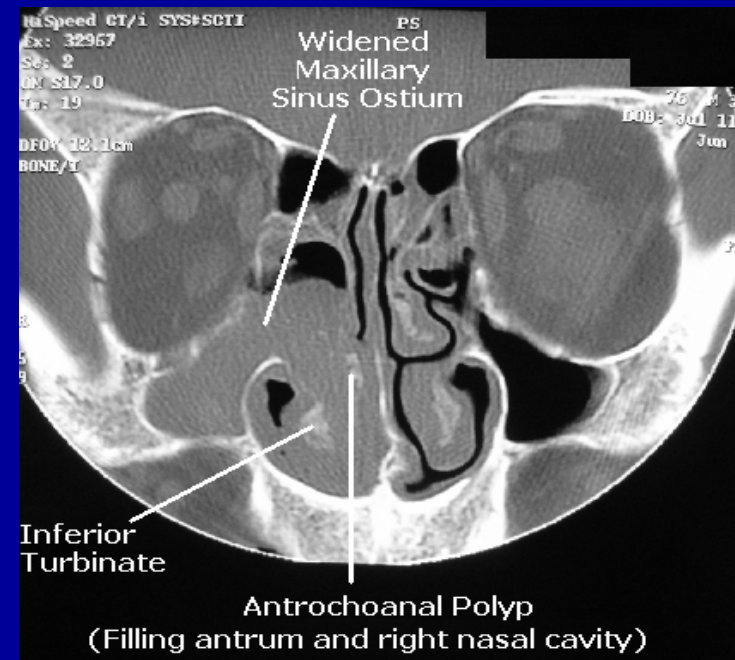




# INVESTIGATIONS

- ROUTINE INVESTIGATIONS AS FOR ETHMOIDAL POLYPS
- X RAY PNS MAY SHOW OPACIFIED ANTRUM
- CT SCAN OF NOSE AND PNS IS METHOD OF CHOICE

-DELINEATES ANATOMY  
-HELPS IN DIAGNOSIS



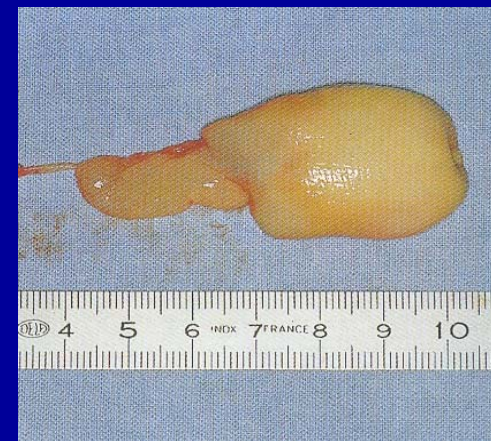
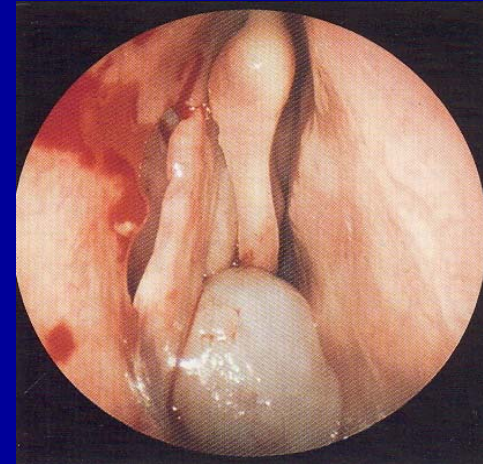
# TREATMENT

## MEDICAL

- ANTIBIOTIC
- ANTI-HISTAMINIC
- DECONGESTANT

## SURGICAL

- AVULSION BY NASAL OR ORAL ROUTE
- *ENDOSCOPIC POLYPECTOMY*
- CALDWELL LUC FOR RECURRENCES



# DIFFERENCES BETWEEN ETHMOIDAL AND AC POLYPS

## ETHMOIDAL POLYPS

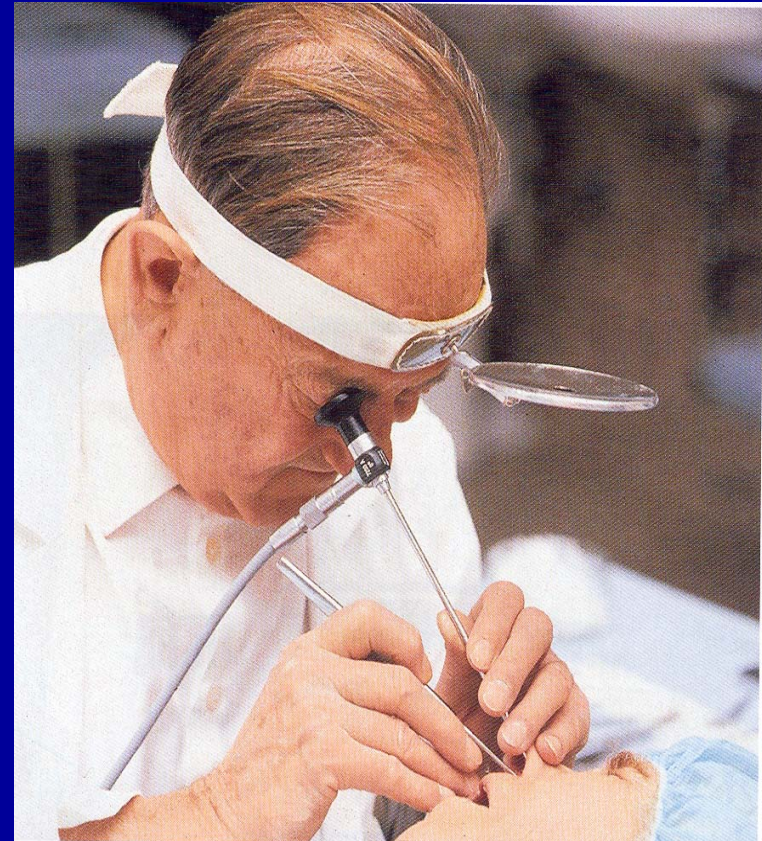
- USUALLY ADULTS
- POSSIBLY ALLERGIC CAUSE
- MULTIPLE, BILATERAL
- ARISES FROM ETHMOIDAL CELLS, GROWS ANTERIORLY
- RECURRENCE COMMON
- TREATED WITH POLYPECTOMY OR ETHMOIDECTOMY OR FESS

## AC POLYPS

- USUALLY CHILDREN
- INFECTIONS
- SINGLE, UNILATERAL
- ARISES FROM MAXILLARY SINUS, GROWS POSTERIORLY
- RECURRENCE UNCOMMON IF REMOVED COMPLETELY
- TREATED WITH AVULSION, CALDWELL LUC AND FESS

# FUNCTIONAL ENDOSCOPIC SINUS SURGERY(FESS)

- **STARTED IN GRAZ, AUSTRIA BY DR MESSERKLINGER AND FURTHER POPULARIZED BY DR STAMMBERGER**
- **BASED ON THE PRINCIPLE OF REMOVAL OF ONLY DISEASED MUCOSA WHILE RETAINING NORMAL PHYSIOLOGY AND ANATOMY**
- **NEEDS**
  - **RIGID ENDOSCOPES OF 0, 30 AND 70 DEGREES**
  - **SPECIAL INSTRUMENTS**

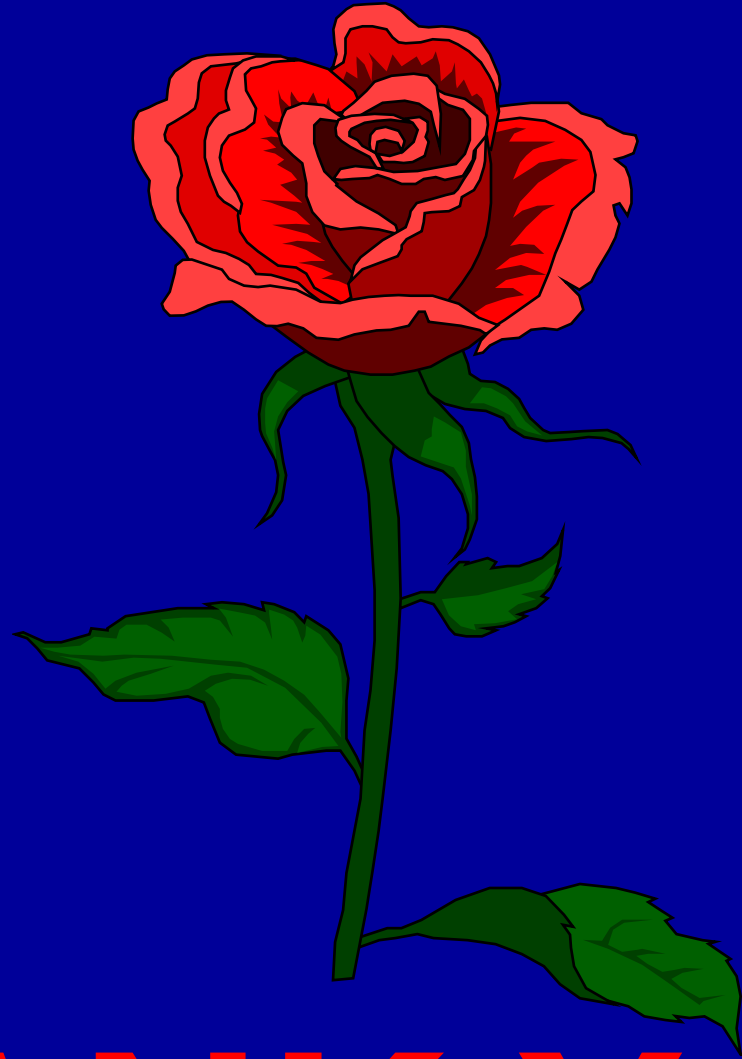


# FUNCTIONAL ENDOSCOPIC SINUS SURGERY(FESS)

- FESS CAN BE DONE UNDER GA OR LA
- DISEASED SINUS MUCOSA OR PATHOLOGY IS REMOVED UNDER DIRECT VISION WITH ENDOSCOPIC CONTROL AND PRECISION AND MINIMAL COMPLICATION RATES

ENDOSCOPIC VIEW OF POLYPS





**THANK YOU**