

**THE MEDICAL AND SURGICAL
MANAGEMENT OF SINUSITIS
IN CHILDREN**

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The Medical and Surgical Management of Sinusitis in Children

I. Introduction

- **Sinusitis is a common disease entity**
- **Number one chronic illness in the U.S.**
- **Accounts for millions of health care dollars**

II Embryology and Anatomy

III. Pathophysiology of Sinusitis

- **Patent Ostia**
- **Mucociliary clearance**
- **Role of ostiomeatal complex**
- **Role of URI + allergies**

IV. Diagnosis:

- **Bacteriology**
- **Clinical Manifestations**
- **Radiographic studies**
 - **Plain radiographs**
 - **CT: Gold Standard**

V. Management of Sinusitis in Children

A. Medical

B. Surgical

Goals of Therapy:

- **Clear the infection**
- **Promote drainage**
- **Promote Mucoiliary Clearance**
- **Promote Ventilation**
- **Alleviate Pain**
- **Avoid recurrence and/or complications**

A. Medical Therapy

- **Antibiotics: Mainstay/cornerstone**
- **Local steroid spray**
- **Analgesics**
- **Antihistamine/decongestants**
- **Systemic steroids**

B. Surgical Therapy

- **Standard Procedures**
 - ***Antrostomies and Lavage**
- **Functional Endonasal Sinus Surgery**

VI. Functional Endonasal Sinus Surgery Children

A. Background: Gross/Lazar

- **Functional, non-ablative, non-exeuterative**

B. Technique:

(i) Preoperative Evaluation

- **Failure of medical therapy**
- **Persistent signs and sxs**
- **CT of sinuses**
- **Allergy evaluation**

(ii) Operation

- **Maximal vasoconstriction**
- **Delicate, atraumatic handling of tissues**
- **Removal of diseased tissue only**
- **Instruments same as in adults**

(iii) Postoperative Management

- **Crucial**
- **Close follow-up**
- **Continue medical RX for 6 weeks**
- **Postop nasal endoscopic examination under G.A. two to three weeks after surgery**

(iv) Results

(v) Complications

VII. Complications of Sinusitis

- A. Local**
- B. Distant**

A. Local Complications:

- **Orbital Infections**
- **Neurologic Infections**
 - **Most Common**
 - **Potentially Fatal**
- **Most Serious**
- **Incidence and Outcome have significantly improved**

1. Diagnosis:

- **CT Gold Standard**

2. Management:

- **Medical Therapy**
- **Conventional Procedures**
- **Role of FESS**

3. Results

B. Distant Complications:

- **Asthma**
- **Bronchitis**
- **Otitis Media**
- **Sepsis**
- **Toxic Shock Syndrome**
- **Diagnosis**
- **Management: Role of FESS**

VIII. Conclusions and Remarks