



Upper Respiratory Tract Infection

Dr. Alireza Fahimzad

Acute Respiratory Infection (ARI)



- Upper Respiratory Tract Infection (URTI)
- Lower Respiratory Tract Infection (LRTI)

ARI



25% all clinical
pediatric visits

Upper RTI

- **Common Cold**
- **Acute Sinusitis**
- **Acute Otitis Media**
- **Pharyngitis**



Common cold



- The most frequent illness in childhood .
- More than 100 serologically different viral types cause this illness.

Average number of cold / year



in children

Urban	5- 8 times
Rural	3-6 times

In adults

1/2 of their children

Common cold



- **Diagnosis** : Clinical
- **History** : recent contact during 3 days ago
- **Symptoms**: nasal congestion, nasal discharge (clear-purulent), throat pain, cough, muscular pain, anorexia,
- **Signs**: fever (low-high (up to 3 days)), nasal mucosal erythema, pharyngitis, conjunctivitis
- **Duration** : ≤ 1 week
- **Therapy** : supportive

Against diagnosis

- Nasal mucosal paleness
(Allergic Rhinitis)
- High fever ($T_{em} > 39$) > 3 days
complication like sinusitis, AOM
- Duration of symptoms > 7 days
(Acute sinusitis)
- Presence of respiratory distress
(brochiolitis, pneumonia)



Recurrent common cold



- Low age
- High exposure
- Passive smoker
- Air pollution
- High stress
- Low microelement

Acute Sinusitis



- ❖ Complication of common cold
 - ❖ 5 – 10 % of all common colds lead to acute sinusitis

Two usual clinical presentation of acute sinusitis

- Common cold with high fever (>3days) and severe signs & symptoms
- Common cold with persistent signs & symptoms (>7-10 days) without fever
 - 7 days with purulent discharge
 - 10 days with clear discharge



Acute Sinusitis



- **Diagnosis** : Clinical
- **History**:allergic rhinitis, adenoid hypertrophy
- **Symptoms**: nasal congestion, nasal discharge (purulent-clear), headache, throat pain, purulent cough, halitosis
- **Signs**: fever (\pm), nasal mucosal congestion, post nasal discharge (PND), facial focal tenderness, orbital edema
- **Therapy** : appropriate antibiotic

Indication of radiology in sinusitis



❑ Waters x-ray:

children > 6 years

suspicious clinical diagnosis

❑ Sinus CT-scan:

possibility of sinus complication
(orbital, intracranial)

progressive sinusitis with inappropriate
response to medical therapy



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512 x 512
FC50

Mag: 0.9x

R

L

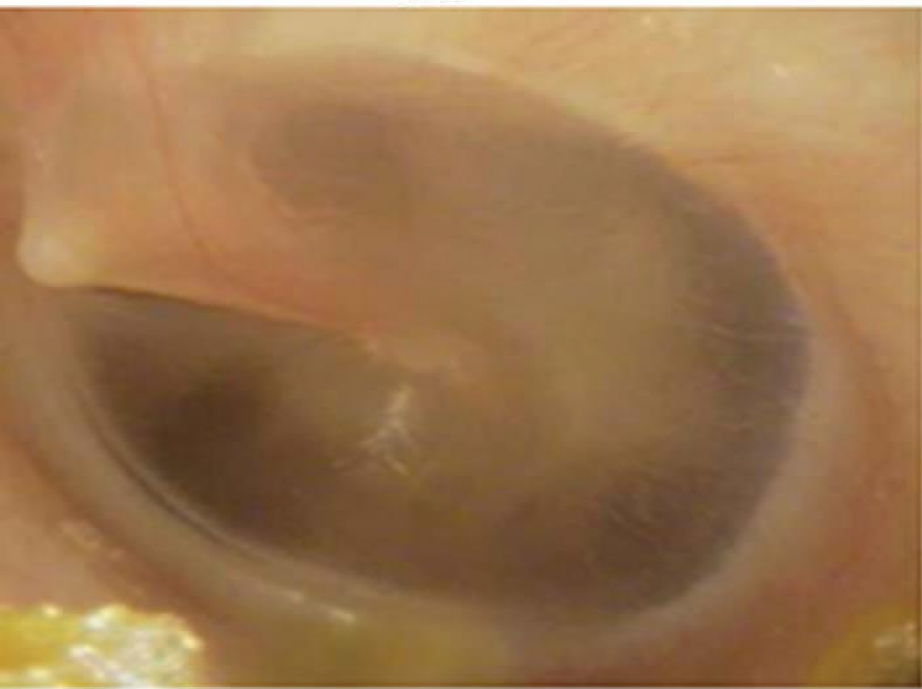


Acute Otitis Media



- **Diagnosis** : Clinical
- **History**: recent common cold, adenoid hypertrophy
- **Symptoms**: otalgia (irritability in infants), anorexia
- **Signs**: fever (in 2/3 cases), marked redness and fullness or bulging of tympanic membrane, purulent otorrhea
- **Therapy** : appropriate antibiotic

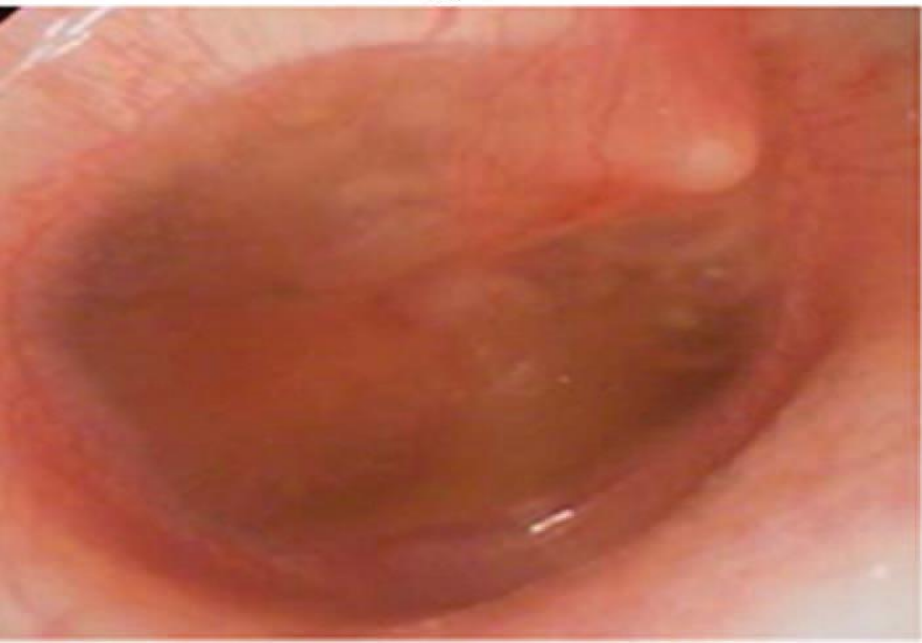
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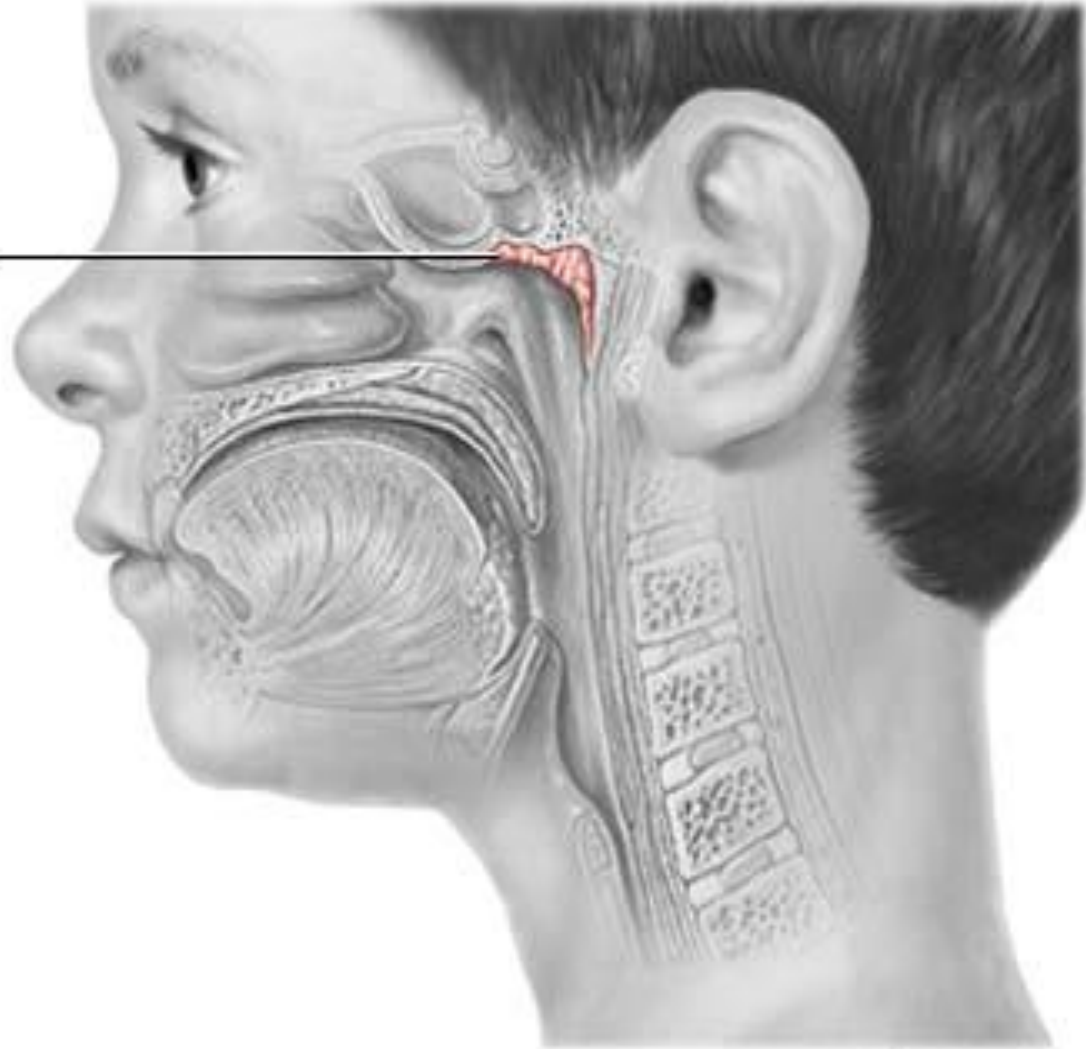
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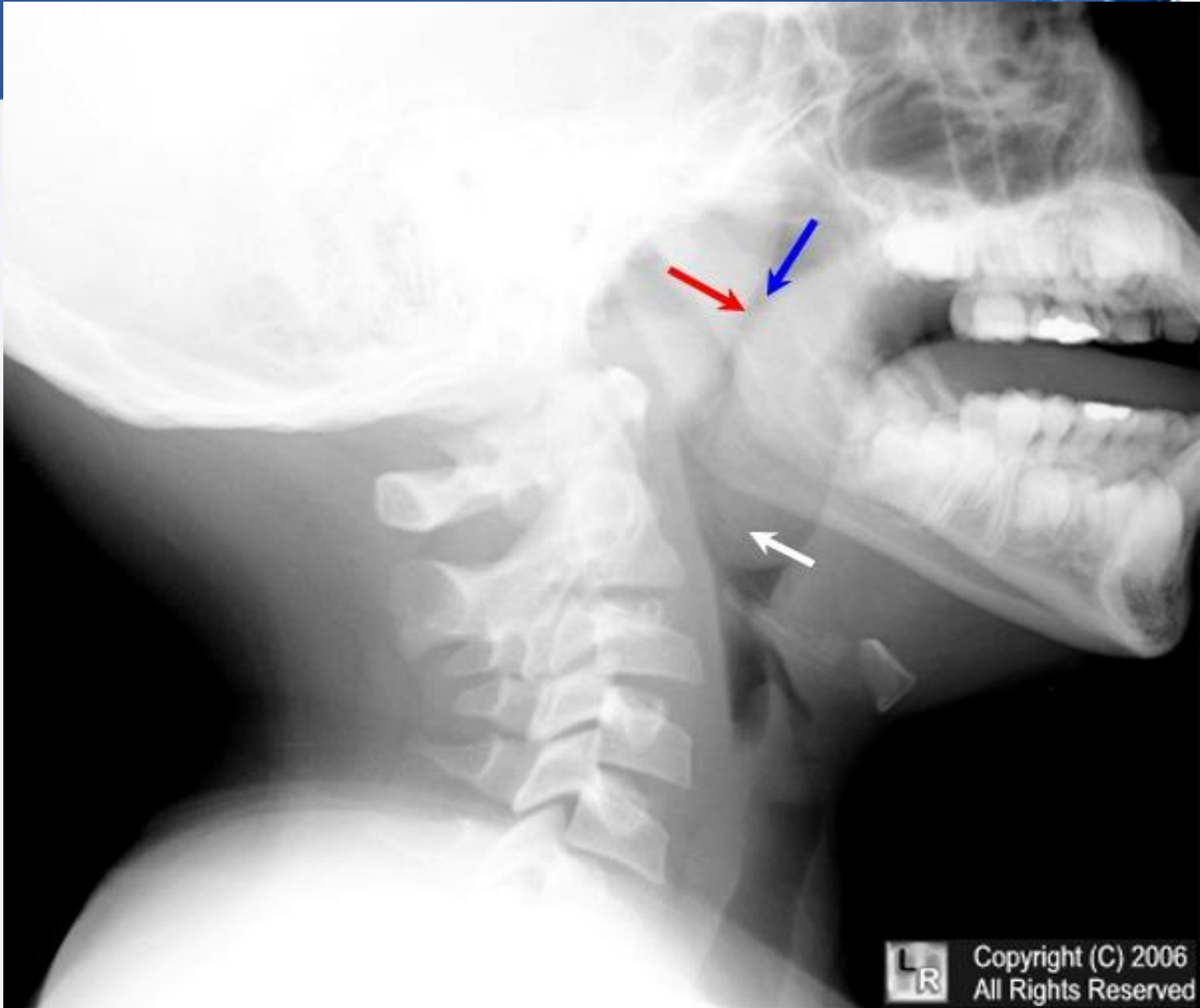
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Adenoid



ADAM.



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Acute pharyngitis



- **Nasopharyngitis:** (with ≥ 2 corysa symptoms)
 - nasal discharge & congestion
 - cough
 - conjunctivitis
 - hoarseness
 - low grade fever
- **Tonsilopharyngitis** (without corysa symptoms)

Tonsilopharyngitis



- **Streptococcal**
- **Non-Streptococcal**

Streptococcal pharyngitis



- **Diagnosis** : Clinical (in developing countries)
- **History**: 5-15 years, cold seasons
- **Symptoms**: throat pain, headache, abdominal pain, vomiting
- **Signs**: sudden & high grade fever, exudative pharyngitis, submandibular lymph node pain & tenderness, palatal petechiae, uvulitis
- **Therapy** : appropriate antibiotic

Clinical criteria of strep. pharyngitis



Tonsilopharyngitis with ≥ 3 criteria:

- 5-15 years
- Cold seasons
- Sudden & high grade fever
- Exudative pharyngitis
- Submandibular lymph node pain & tenderness

Against strep. pharyngitis

- ✓ Corysa symptoms
(viral nasopharyngitis)
- ✓ Distinct vesicular lesion
(herpangina)
- ✓ Exudative pharyngitis with post.
Cervical lymph. & splenomegaly
(infectious mononucleosis)
- ✓ Membranous and dirty exudative lesion
(R/O diphtheria)



streptococcal pharyngitis



Herpangina





Thank You !