

## PHARYNGITIS

**Modified Centor Score** – Estimates likelihood of streptococcal pharyngitis and need for antibiotics in acute pharyngitis

1 point each: fever >38°C, tender anterior cervical lymphadenopathy, tonsillar exudate / swelling, absence of cough

Some physicians also use age criteria: 3-14 years add 1 point, 15-44 years add 0 points, >45 years subtract 1 point

→ Score 0-1: Ø swab, Ø treatment, Score 2-3: swab & Tx if swab (+), Score 4: swab & Tx

### Differentiating Strep Throat vs. Mononucleosis

<b>Strep Throat</b>	+ fatigue, (-) monospot, + nodes	
<b>Mononucleosis</b>	atypical lymphocytosis, ++ fatigue, ± hepatomegaly, ± liver enzymes, + monospot (*), ++ nodes, ± splenomegaly	(* <i>Note that (+) monospot in mononucleosis may be delayed 1-2 weeks</i> )

**Management** (For dosing & 3<sup>rd</sup> line drugs refer to Common Infections E-Module)

Adult 1<sup>st</sup> line: Penicillin V, 2<sup>nd</sup> line: Erythromycin      Children 1<sup>st</sup> line: Penicillin V, Amoxicillin, 2<sup>nd</sup> line: Erythromycin

### Complications of Strep Throat

Bacteremia (rare), cervical lymphadenitis, meningitis (rare), otitis media, peritonsillar abscess, pneumonia (rare), rheumatic fever, scarlet fever, sinusitis. *\*Note that treatment of strep throat does not prevent post-strep glomerulonephritis*

## SINUSITIS

### Diagnostic Criteria and Management of Bacterial Sinusitis

Major (5)	Minor (6)
1) Facial pain / pressure / fullness, 2) Nasal obstruction, 3) Nasal purulence, 4) Discoloured postnasal drip, 5) Hypo-/Anosmia	1) Cough, 2) Dental pain, 3) Ear pain / pressure or fullness 4) Fatigue, 5) Halitosis, 6) Headache

For diagnosis of acute bacterial rhinosinusitis, the patient must have **nasal purulence / discharge** and at least one other symptom of **facial pain, nasal obstruction, discoloured postnasal discharge** or **hyposmia/anosmia**. Consider ABRS if the patient worsens after 5-7 days (biphasic illness) with similar symptoms, if symptoms persist for more than 7 days without improvement, or if purulence is present for 3-4 days with high fever.

**Tx:** Amoxicillin (if allergic give Clarithromycin or Azithromycin) • Saline rinse / spray, oral decongestant, intranasal steroids

### Acute vs. Chronic vs. Recurrent Sinusitis

**Acute Sinusitis** ≤ 4 weeks      **Chronic Sinusitis** > 12 weeks      **Recurrent Sinusitis** ≥ 4 episodes / yr, Ø symptoms in-between

### Complications of Acute Rhinosinusitis

Cavernous sinus thrombosis, chronic sinusitis, meningitis, (peri)orbital cellulitis / abscess

### Referrals

Referral to **otolaryngologist** for: anatomical anomalies, 4+ episodes/yr bacterial sinusitis, chronic sinusitis unresponsive to Tx

**Red Flags** (require urgent referral): Abnormal vision (diplopia, blindness, ↓ visual acuity), change in mental status, extraocular muscle dysfunction, meningitis, periorbital or forehead swelling / edema

## ACUTE OTITIS MEDIA

### Management

<b>&lt;6 Months</b>	Start antibiotics if: Child is <6 months, child looks toxic, follow-up cannot be assured, severe otalgia, temp >39°C
<b>&gt;6 Months</b>	Watchful waiting 48-72 hours (+ may offer deferred Rx) if: Mild signs & symptoms + follow-up assured
<b>Rx</b>	<ul style="list-style-type: none"> <li>High spontaneous recovery (80-90%). Treat earache/fever with acetaminophen/ibuprofen/other analgesics</li> <li>1<sup>st</sup> Line: Amoxicillin, 2<sup>nd</sup> Line: Amoxicillin / Clavulanate or Cefprozil (<i>see module for dosing &amp; 3<sup>rd</sup> line drugs</i>)</li> <li>Ciprodex otic drops for chronic TM perforation / t-tube ventilation (presentation = chronic painless discharge)</li> </ul>
<b>Reassess</b>	Ø improvement / worsening of symptoms, new symptoms (i.e. rash, drowsiness, difficulty breathing, vomiting)

## BRONCHITIS

### Differentiating Bronchitis vs. Pneumonia

<b>Bronchitis</b>	Afebrile, patient does not appear as sick	
<b>Pneumonia</b>	± Consolidation on X-Ray, ± tachypnea, ± tachycardia, ↑ WBC, ± dullness to percussion	<i>Note: Sputum culture often unhelpful unless considering TB or in special population (i.e. immunocompromised)</i>

### Management

Supportive, fluids, rest, analgesics, antitussives, opioid-based cough suppressants (limit duration), bronchodilators

<b>Antibiotics</b>	Not routinely used because 90% viral etiology. Consider antimicrobial therapy if ↑ risk significant complications (i.e. elderly, comorbidities) or pneumonia/pertussis suspected.
<b>Prevention</b>	Frequent hand washing, smoking cessation, irritant exposure avoidance

## URINARY TRACT INFECTION

### Investigations

<b>Clinic</b>	Urine Dipstick → WBC, RBC, Nitrites → If 2+ of dysuria, leukocytes, nitrites → Treat without culture
<b>Laboratory</b>	Urine Culture → Most common bacteria associated with UTI: "KEEPS" (90% E. coli)

### Differentiating Uncomplicated vs. Complicated UTI

**Uncomplicated:** Diaphragm/spermicide use, family history of UTI, frequent sexual intercourse, infrequent voiding, new sexual partner within last year, previous UTIs, young ♀

**Complicated:** Anatomical anomaly, immunocompromized, instrumentation (catheter, nephrostomy tube, urologic procedure), ♂

### Differentiating Clinical & Laboratory Features of UTI vs. Pyelonephritis

UTI	Pyelonephritis	Both
Absence of flank pain, afebrile, normal WBC, patient appears less sick	± CVA Tenderness, ± N/V, ↑ WBC	Dysuria, frequency, ± hematuria, suprapubic pain, urgency

### Management

<b>Asymptomatic Bacteriuria</b>	Screen <u>only</u> in pregnancy or post-op GU procedures. Do not treat elderly with asymptomatic bacteriuria. If UTI suspected, culture before Rx.
<b>Uncomplicated UTI ♀ &gt;12 yrs</b>	1 <sup>st</sup> Line: Nitrofurantoin or TMP-SMX ( <i>see module for dosing &amp; 2<sup>nd</sup>/3<sup>rd</sup> line drugs</i> )
<b>Complicated UTIs</b>	Same drugs but ↑ treatment duration ( <i>see module for details</i> )
<b>Prevention / Non-Pharmacologic</b>	Avoiding spermicide-containing contraception, post-coital micturition, hygiene practices, frequent urination, cranberry juice / tablets
<b>Referrals</b>	Refer for: persistent hematuria following resolution of UTI, recurrent UTI not managed with prophylactic antibiotics, anatomic anomalies (i.e. prolapse, stricture)

## VAGINITIS

### Differentiating Yeast Vaginitis (YV) vs. Bacterial Vaginosis (BV)

**YV:** Associated itchiness, thick/white cottage cheese-like discharge

**BV:** Associated odour, grey/thin discharge

### Investigations & Management

<b>Yeast Vaginitis</b>	Vaginal swab → Rx Vaginal preparations of clotrimazole or miconazole	
<b>BV</b>	Vaginal swab (*) or KOH Whiff Test → Rx Metronidazole PO or intravaginal metronidazole/clindamycin	
<b>Trichomonas</b>	Vaginal Swab (Diamond's Medium) → Rx Metronidazole PO	
<b>Chlamydia</b>	Cervical swab → Rx Azithromycin PO	* Rx for both Chlamydia and Gonorrhoea at same time because often co-infected
<b>Gonorrhoea</b>	Cervical swab → Rx Ceftriaxone IM + Azithromycin PO	

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