



ASHFAQ ACADEMY OF CLINICAL MEDICINE

Pediatrics OPD Masterclass

Sample notes · Day 2: Respiratory & ENT

This is a short preview of the student notes and clinical reference you receive with the course. The full Day 2 notes cover cough, pharyngitis and tonsillitis, asthma, pneumonia, stridor and ENT, plus drug-dose and scoring-tool appendices.

Shown here: how to use the notes, the contents, and the opening pages of Chapter 1.

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PREVIEW EDITION

How to Use These Notes

These notes are the complete Day 2 clinical reference for the Pediatric OPD Mastery workshop — covering Respiratory and ENT paediatric conditions. They function as both a workshop companion and a standalone daily OPD reference.

Contents at a Glance

- Chapter 1: Cough — Classification, Pertussis, TB in Children, Chronic Cough Differentials
- Chapter 2: Upper Respiratory Tract Infections — Viral URTI, Pharyngitis, GAS Tonsillitis (McIsaac Score), Scarlet Fever, EBV/Glandular Fever, Rheumatic Fever Prevention, Peritonsillar Abscess, Retropharyngeal Abscess, Sinusitis
- Chapter 3: Wheeze, Asthma & Bronchiolitis — Differential, GINA 2024 Stepwise Management, Inhaler Device Training, Acute Asthma Protocol, Bronchiolitis Evidence Table
- Chapter 4: Pneumonia — Aetiology by Age, Viral vs Bacterial vs Atypical Comparison, WHO Severity and Management Algorithm, Empyema
- Chapter 5: Stridor & Upper Airway Emergencies — Classification, Westley Croup Score, Croup Management, Epiglottitis Protocol, Foreign Body Aspiration, Bacterial Tracheitis
- Chapter 6: ENT in Paediatric OPD — Allergic Rhinitis Treatment Ladder, AOM Evidence-Based Management, OME/Glue Ear, Recurrent Tonsillitis (Paradise Criteria), Epistaxis Protocol, Hearing Loss Screening, Immunodeficiency Red Flags
- Appendix A: Respiratory and Antibiotic Drug Dose Quick Reference — BNF for Children 2023-24
- Appendix B: Clinical Scoring Tools — Westley, ACT/cACT, McIsaac, WHO Respiratory Rate Thresholds
- Appendix C: Key References

Medical Accuracy

All drug doses are sourced from BNF for Children 2023-24. Clinical guidelines from GINA 2024, BTS 2023, NICE, AAP, WHO, IDSA, and ARIA as referenced throughout. Cross-referenced with Nelson's Textbook of Paediatrics 21st Edition.

KEY POINTS	Take-home summaries for practice and examination
CLINICAL PEARLS	Practical clinical wisdom
RED FLAGS	Must-not-miss findings
CAUTION	Contraindications and drug warnings
ALGORITHM	Step-by-step clinical frameworks
DEFINITION	Formal clinical definitions

Contents

Chapter 1	Cough — Classification, Pertussis, TB, Chronic Cough	4
1.1	Classification by Duration	4
1.2	Cough Character	4
1.3	Pertussis — Phases, Diagnosis, Treatment	5
1.4	Tuberculosis in Children	6
1.5	Chronic Cough Comparison Table	8
Chapter 2	Upper Respiratory Tract Infections	9
2.1	Viral URTI / Common Cold	9
2.2	Pharyngitis and Tonsillitis	9
2.3	Scarlet Fever	11
2.4	EBV — Infectious Mononucleosis	11
2.5	Acute Rheumatic Fever — Prevention	12
2.6	Recurrent Tonsillitis — Surgical Indications	13
2.7	Peritonsillar Abscess	14
2.8	Retropharyngeal Abscess	14
2.9	Sinusitis	15
Chapter 3	Wheeze, Asthma & Bronchiolitis	16
3.1	Wheeze Differential	16
3.2	Asthma Diagnosis	17
3.3	GINA 2024 Stepwise Management	17
3.4	Inhaler Device Training	19
3.5	Acute Asthma Management	20
3.6	Bronchiolitis	21
Chapter 4	Pneumonia	23
4.1-4.6	Aetiology · Severity · Treatment · Empyema	23
Chapter 5	Stridor & Upper Airway Emergencies	27
5.1-5.5	Classification · Croup · Epiglottitis · Foreign Body · Tracheitis	27
Chapter 6	ENT in Paediatric OPD	32
6.1-6.7	Allergic Rhinitis · AOM · OME · Tonsils · Epistaxis · Hearing · PID Flags	32
Appendix A	Respiratory & Antibiotic Drug Dose Reference	38
Appendix B	Clinical Scoring Tools	41
Appendix C	References	42

Cough in Children

Classification · Pertussis · Tuberculosis · Cough-Variant Asthma · Habit Cough

REFERENCE

- Shields MD et al. BTS guidelines: Recommendations for the assessment and management of cough in children. Thorax 2008;63(Suppl 3):iii1–15. Chang AB et al. CHEST Guideline on Cough in Children: executive summary. Chest 2020;158(1):228–59.

1.1 Classification by Duration

Type	Duration	Key Differential Diagnoses	Pakistan Notes
Acute	<3 weeks	Viral URTI, acute bronchitis, croup, influenza, COVID-19	Foreign body aspiration always consider in toddlers — sudden onset
Subacute	3–8 weeks	Post-infectious bronchial hyperreactivity, Bordetella pertussis, Mycoplasma pneumoniae	Pertussis increasingly common due to waning vaccine immunity
Chronic	>8 weeks	Asthma (cough-variant), allergic rhinitis/UACS, GERD, habit cough, TB, bronchiectasis	TB must always be in differential in Pakistani children with chronic cough

1.2 Cough Character — Clinical Significance

Character	Typical Sound	Most Likely Cause	Key Differentiating Feature
Barking / Seal-like	Loud, harsh, seal-like bark	Croup (laryngotracheobronchitis)	Accompanies hoarse voice and inspiratory stridor; 6 mo–3 yr peak
Paroxysmal / Whooping	Prolonged paroxysms ending in inspiratory whoop	Pertussis (Bordetella pertussis)	Post-tussive vomiting; in infants: cyanosis instead of whoop
Dry / Tickly / Nocturnal	Non-productive, worse at night or with exercise	Asthma (cough-variant), post-viral, UACS	Completely absent in sleep distinguishes habit cough
Wet / Productive	Chesty, mucus audible or produced	Bacterial infection, bronchiectasis, CF, primary ciliary dyskinesia	Wet cough lasting >4 weeks needs further investigation
Brassy / Honking	Loud, theatrical, attention-drawing	Habit (psychogenic/somatic) cough	Pathognomonic: completely absent during sleep
Staccato / Rapid-	Short, rapid coughs in	Chlamydia trachomatis	Eosinophilia; afebrile; conjunctivitis

fire	sequence; AFEBRILE	pneumonia (neonate/young infant)	may coexist
Cough + haemoptysis	Any cough with blood	TB, bronchiectasis, pulmonary AVM, foreign body (rare)	Always investigate; never dismiss in children

KEY POINTS

1. The single most diagnostic feature of habit cough: completely absent during sleep. If a parent says the cough wakes the child — it is NOT habit cough.

1.3 Pertussis (Whooping Cough)

REFERENCE

- WHO. Pertussis vaccines: WHO position paper. Wkly Epidemiol Rec 2015;90:433–60. CDC. Recommended Antimicrobial Agents for the Treatment and Postexposure Prophylaxis of Pertussis. MMWR 2005;54(RR-14).

DEFINITION

- Pertussis is a highly contagious respiratory infection caused by *Bordetella pertussis*. Despite high infant vaccination rates, it causes significant morbidity due to waning immunity in older children and adults who then transmit to unvaccinated/incompletely vaccinated infants.

Phase	Duration	Clinical Features	Diagnostic/Management Notes
Catarrhal	1–2 weeks	Rhinorrhoea, mild cough, low-grade fever — identical to viral URTI. MOST CONTAGIOUS phase.	Treatment most effective here but diagnosis rarely made (clinically indistinguishable from cold)
Paroxysmal	2–8 weeks (up to 10 weeks)	Prolonged paroxysmal coughing fits. In >6 months/older: inspiratory whoop after paroxysm. Post-tussive vomiting. Between paroxysms: child surprisingly well.	In infants <6 months: NO WHOOP — instead apnoeic episodes and cyanosis. More dangerous.
Convalescent	Weeks–months	Gradually decreasing paroxysmal frequency. Any respiratory irritant can trigger recurrence.	Pertussis is the "100-day cough" — manage expectations with parents

PERTUSSIS — DIAGNOSIS

Test	Timing	Sensitivity	Notes
Nasopharyngeal PCR	Best in first 3 weeks of cough	High (>95% in early disease)	Test of choice. Specificity >98%. Gold standard for acute diagnosis.
Nasopharyngeal culture	Best in first 2 weeks	30–60%	Very slow; low yield; Bordet-Gengou or