

Name of Book	
Name of Elective	PATTERN OF VIRAL INFECTIONS IN CHILDREN WITH COMMUNITY-ACQUIRED PNEUMONIA
Location of hospital Lab or research facility	Pediatric Ward and PICU, DMCH, Ludhiana
Name of internal preceptor(s)	Dr. Gurdeep Singh Dhooria
Name of external preceptor (if applicable)	-
Learning objectives of elective	1. Identify the most common viral pathogens responsible for CAP in children. 2. Understand the clinical manifestations and diagnostic challenges associated with viral CAP. 3. Evaluate current diagnostic methods and their effectiveness in detecting viral infections.
Number of students that can be accommodated in this elective	2
Prerequisites for elective	Good clinical practice Universal precautions
Learning resources for students	Text Book of Pediatrics, Dr OP Ghai Nelson Text Book of Pediatrics
List of activities of student participation	1. Work daily with supervisor in observing and assisting workup of patients of viral infections in CAP in Pediatric ward and PICU 2. To document atleast 20 pateints of CAP on the proforma and plan treatment of these patients 3. Apply evidence-based management plans for children with viral CAP.
Portfolio entries required	Documentation of proforma of worked up cases
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	Attendance; day-to-day participation in departmental activity; performance of assigned tasks
Other comments	

Introduction

Community-acquired pneumonia (CAP) is a leading cause of hospitalization and morbidity in children worldwide. It is commonly caused by bacterial pathogens, but viral infections are also a significant and increasingly recognized contributor to pediatric CAP. With the rising importance of viral pathogens in CAP, particularly in the context of the COVID-19 pandemic, understanding their role in the pathogenesis, severity, and clinical outcomes of pneumonia is crucial for optimizing treatment strategies and improving patient care.

This elective will focus on exploring the prevalence of viral infections in children hospitalized with community-acquired pneumonia. The course will examine common viral pathogens such as respiratory syncytial virus (RSV), influenza, adenovirus, and coronaviruses, and their diagnostic identification through clinical, microbiological, and molecular methods. Students will have the opportunity to participate in observational studies, analyze hospital data, and explore the relationship between viral infections and clinical outcomes such as length of stay, severity of disease, and complications.

Purpose: By the end of this elective, participants will gain valuable knowledge on the clinical presentation, diagnostic approaches, and management of viral pneumonia in children, as well as a deeper understanding of the epidemiology and public health implications of viral respiratory infections in pediatric populations. This elective will provide a strong foundation for those interested in pediatric infectious diseases, hospital medicine, and evidence-based clinical research.