

Bronchiolitis in Infants and Young Children: A Clinical and Epidemiological Review

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Editorial

Received: 03-Mar-2025, Manuscript No. JCROA-25-187014; **Editor assigned:** 05-Mar-2025, Pre-QC No. JCROA-25-187014 (PQ); **Reviewed:** 18-Mar-2025, QC No. JCROA-25-187014; **Revised:** 23-Mar-2025, Manuscript No. JCROA-25-187014 (R); **Published:** 30-Mar-2025, DOI: 10.4172/jcroa.7.003

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Citation: Ananya Reddy, Bronchiolitis in Infants and Young Children: A Clinical and Epidemiological Review. J Clin Respir. 2025.7.003.

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Crowded living environments

Pathophysiology

Viral infection causes inflammation, edema, and mucus accumulation in the bronchioles. These changes lead to airway obstruction and impaired oxygen exchange, resulting in respiratory distress[3].

Clinical Manifestations

Initial symptoms resemble a common cold, including:

Runny nose

Mild fever

Nasal congestion

As the disease progresses:

Wheezing

ABSTRACT

Bronchiolitis is a viral infection that primarily affects infants and young children, causing inflammation of the bronchioles. It is a leading cause of hospitalization in early childhood. This article discusses the causes, pathophysiology, clinical presentation, diagnosis, and management of bronchiolitis[1].

Keywords

Bronchiolitis, Respiratory syncytial virus, pediatric infection, Bronchioles, Viral respiratory disease, Infant health

INTRODUCTION

Bronchiolitis is a lower respiratory tract infection affecting children under two years of age. It is characterized by inflammation and obstruction of the bronchioles, leading to respiratory distress. The condition is especially common during seasonal viral outbreaks[2].

Etiology and Risk Factors

The most common cause of bronchiolitis is respiratory syncytial virus (RSV). Other viruses include influenza, adenovirus, and rhinovirus.

Risk factors include:

Premature birth

Low birth weight

Exposure to tobacco smoke

Lack of breastfeeding

Persistent cough

Rapid breathing

Difficulty feeding

Diagnosis

Diagnosis is primarily clinical and based on history and physical examination. Monitoring oxygen levels and respiratory status is essential. Laboratory tests are generally unnecessary unless complications arise[4].

Management and Treatment

Treatment is mainly supportive:

Adequate hydration

Nasal suctioning

Oxygen therapy in severe cases

Hospitalization may be required for infants with severe respiratory distress. Antibiotics are not indicated as the condition is viral.

Prevention

Preventive measures include maintaining hygiene, avoiding exposure to infected individuals, and promoting breastfeeding to enhance immunity.

CONCLUSION

Bronchiolitis is a common pediatric condition with significant clinical implications. Early recognition and supportive care are key to preventing complications and ensuring recovery[5]

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