

Update on the Management of Bronchiolitis in Infants: A Narrative Review

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Abstract: *Bronchiolitis is a leading cause of lower respiratory tract infections in infants under 2 years. This review provides a consolidated update on evidence-based management strategies with a focus on current guidelines and emerging therapies.*

Keywords: bronchiolitis, infants, respiratory infection, management guidelines, emerging therapies

1.Introduction

Bronchiolitis is typically caused by viral infections, most commonly respiratory syncytial virus (RSV). It presents with cough, wheeze, and respiratory distress. Hospitalization is sometimes required for supportive care.

References

- [1] AAP Clinical Practice Guideline 2014
- [2] NICE Guideline NG9
- [3] WHO Management of Acute Respiratory Infections
- [4] Recent trials on nirsevimab and palivizumab

2.Etiology and Pathophysiology

RSV is responsible for 50-80% of cases. Other causes include rhinovirus, influenza, and parainfluenza. The disease is characterized by inflammation, mucus production, and airway obstruction.

3.Clinical Features and Diagnosis

Diagnosis is clinical, based on age <2 years, preceding upper respiratory infection, and signs of respiratory distress. Investigations are not routinely needed unless atypical presentations occur.

4.Current Guidelines for Management

Guidelines from AAP, NICE, and WHO emphasize supportive care, including oxygen, hydration, and minimal handling. Routine use of bronchodilators, corticosteroids, and antibiotics is discouraged.

5.Emerging Therapies and Future Directions

Research is exploring the use of monoclonal antibodies (e. g., nirsevimab), nebulized hypertonic saline, and host-directed therapies. More evidence is needed before routine use.

6.Prevention Strategies

Palivizumab is used for high-risk infants (preterm, CHD, CLD). The newly approved long-acting antibody nirsevimab offers broader prophylactic protection.

7.Conclusion

Management of bronchiolitis remains largely supportive. Adherence to evidence-based guidelines can reduce unnecessary interventions. Emerging therapies may alter future practice.