

Bronchiolitis Obliterans- A Rare Sequelae of Measles

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Type of Publication: Case Report

Conflicts of Interest: Nil

Introduction

Bronchiolitis obliterans (BO) is a rare form of chronic obstruction of the airways which is associated to inflammatory abnormalities

of the bronchioles and whose histological characterisation is intraluminal obstruction of the bronchioles. OB is characterized by progressive (often fatal) airflow obstruction, the absence of parenchymal infiltrates on chest radiographs, mosaic pattern of perfusion on high-resolution computed tomographic scan, poor responsiveness to therapy, **The most common associated viral etiology is adenovirus, especially serotypes 1, 3, 7 and 2.**

Case Report

A 7 year old female child

Chief complaints: fever, cough since 3month, breathlessness since 1 month.

Past history: h/o measles 1 month back.

Systemic examination

Severely thin, conscious,

PR-150/min ,RR-68/min

spO2:85% on room air

RS-air entry bilaterally reduced with bilateral coarse crepts

Investigations

Endotracheal tube secretions and bronchiole lavage for culture and sensitivity	Acinetobacter species sensitive to colistin, vancomycin and linezolid
2D Echo	Moderate Pulmonary Hypertension .
HRCT CHEST	decreased lung attenuation with ground glass opacities
Kochs workup ,HIV	MT-13 mm, GL for AFB negative gene expert negative BAL-negative negative
CXR	increased bronchovascular markings

Child was intubated i/v/o impending respiratory failure. Although there was no evidence of bacterial, fungal or tuberculosis infection she received treatment for all these on clinical grounds.

Diagnosis of bronchiolitis obliterans was suspected because of bilateral CXR infiltrates with CT scan s/o ground glass opacities with mosaic pattern and air trapping and non response to antibiotics and clinical deterioration.

Pulmonary function tests:could not be done since child was mechanically ventilated.

Child was started on steroids but the child succumbed and expired.

Discussion and Conclusion

Post-infectious bronchiolitis obliterans is an infrequent chronic obstructive pulmonary disease that develops in children as sequelae of a severe viral LRTI that injured irreversibly the bronchiolar micro-environment. The diagnosis is reached only through the integration of clinical, radiological and laboratory data suggestive of the disease. Radiological modalities like HRCT chest help in establishing diagnosis .A multidisciplinary approach with supportive care and oxygenation with inhaled steroids and physiotherapy may help in clinical improvement and improving quality of life.

References

1. Obliterative (Constrictive) Bronchiolitis Joseph P. Lynch, III, M.D. The David Geffen School of Medicine Los Angeles
2. Post-Infectious Bronchiolitis Obliterans Marcus H. Jones, Porto Alegre, Brazil.
3. Post-infectious bronchiolitis obliterans in children, Ana Luísa Lobo et al.
4. Post Infectious Bronchiolitis Obliterans in Children Gilberto B. Fischer.