Severe Asthma

with Bilateral Pneumothorax in a Suspected Case of Marfan Syndrome

Case Diagnosed and Treated by :
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Case Documented by :
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Patient Profile

Age/Gender:

Child (Age 14 years Female)

Presenting Complaint:

Acute severe asthma exacerbation with respiratory distress

Clinical Background

The child presented in respiratory failure with ET in situ due to Acute Severe Asthma complicated by bilateral pneumothorax a rare and life-threatening combination in pediatric patients. On admission, air entry was critically reduced bilaterally.

Investigations & Findings

PCO_2

Extremely elevated at 210, indicating severe **respiratory acidosis**

Clinical Features Suggestive of Marfan Syndrome

- Pectus carinatum
- Long fingers
- Positive wrist sign
- Crowded maxillary teeth

Past History

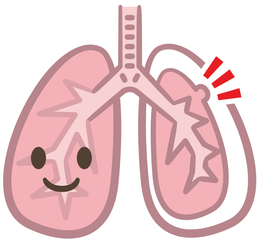
- Previous episode of pneumothorax managed locally (1 year ago)
- **Diagnosis in consideration:** Suspected Marfan Syndrome (genetic test report awaited)

Procedure Performed

Bilateral chest tube insertion was performed emergently by Dr. Abhishek, leading to immediate clinical improvement through effective decompression of both lungs.

Clinical Challenge

This case presented multiple overlapping complications



- Fragile lungs with subpleural blebs are at high risk of rupture
- Bilateral pneumothorax complicates mechanical ventilation
- Suspected Marfan Syndrome affecting lung resilience and healing
- Severe asthma worsening ventilation dynamics

Outcome

With aggressive PICU management, careful ventilation, and close multidisciplinary monitoring, the child recovered gradually and was successfully discharged—a notable outcome in an exceptionally high-risk and complex case.

Clinical Takeaway

Asthma rarely culminates in the dramatic complication of bilateral pneumothorax.

This patient has a striking history — a previous pneumothorax one year ago, accompanied by notable physical features: pectus carinatum, long slender (“arachnodactylous”) fingers, a positive wrist sign, and crowded maxillary teeth. Together, these features paint a compelling clinical picture highly suggestive of an underlying connective tissue disorder, most likely Marfan syndrome.

To view the Detailed Case Video **Click Here**