CHRONIC ASPIRATION AS A CAUSE OF SEVERE INTERSTITIAL LUNG DISEASE

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Background: Aspiration into the airways and lungs may cause a variety of pulmonary complications. Development of severe interstitial lung disease due to aspiration has been rarely described in children.

Case report: We present a case of a 2 years old boy who was referred to us with recurrent pneumonia, prolonged coughing, variable recurrent cracles and wheezes and severe failure to thrive. Saturation of blood haemoglobin was about 90% at the time of admission. A diffuse interstitial reticulonodular pattern was found on chest radiograph. No immunodeficiency was found, on the contrary, levels of IgG and IgA were elevated suggesting chronic inflammation. Sweat test repeatedly normal. Screening of ciliary function normal, GER not detected by 24 hrs pH probe. On flexible laryngotracheobronchoscopy a severe suppurative bronchitis was found. He was treated with antibiotics, mucolytics, inhalations, physiotherapy with only partial effect. After evaluating all the available results, we started to suspect a disorder of swallowing. Swallow scan with aqueous contrast revealed serious discoordination of swallowing with immediate penetration of the contrast into the airways. We proceeded with HRCT scan which showed a severe interstitial granular pattern, chronic peribronchial infiltration and incipient bronchiectasis. All these finding resulted in the decision to insert percutaneous gastrostomy and discontinuing of all oral intake.

Outcome: At follow-up after 6 months the child is doing much better, maintaining normal saturations with no need of supplemental oxygen and significantly gaining weight. Re-education of the swallowing reflex will be the next step with the possible perspective to may reintroduce at least some oral feeding in the near future.

Conclusion: Swallowing discoordination in the absence of gastroesophageal reflux is the least suspected etiology of chronic aspiration whose prevalence may be higher that generally suspected. Evaluation of swallowing should be included in the diagnostic algorithm of every child with recurrent or chronic aspiration.

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