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The Role of Oropharyngeal Barotrauma as a Cause of Pneumomediastinum: Report of a Case

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ABSTRACT

Free air or gas in mediastinum is defined as pneumomediastinum. This is a rare condition which orginates from over distention of alveolus and alveolar rupture by barotrauma. A 6-year-old boy was admitted to our department with sudden onset, swelling of neck and face that developed during drinking water from tap by using his mouth. Physical examination revealed the presence of subcutaneous emphysema over the two side of the face that extended toward the neck bilaterally. The chest X-ray and CT of the thorax, when performed, revealed the diagnosis of pneumomediastinum and extrathoracic subcutaneous emphysema. Interestingly neither trachea-bronchial nor esophageal pathology was found by emergent rigid bronchoscopy and endoscopy for etiology of pneumomediastinum. Antibiotic treatment and oxygen therapy were given to the patient with chest pain and dyspnea. During the following days, the patient ' s condition improved notably, with almost total resolution of the cervical emphysema and pneumomediastinum confirmed by daily chest X-ray and control thorax CT. He was discharged home after 6 days. The emphysema gradually resolved. Pneumomediastinum caused by barotrauma is a rare condition and only conservative treatment is required when the other causes are ruled out.

KEYWORDS

Oropharyngeal; Barotrauma; Pneumomediastinum

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