CAUSES OF HEMOPTYSIS IN EGYPTIAN CHILDREN

ML Naguib (1), AM Abdel Hafiz (1), K El Shahat (2)
(1) Cairo University - Guiza (Egypt)
(2) Guiza Chest Hospital - Cairo (Egypt)

Objectives: Hemoptysis, an important and alarming symptom, especially in children. This study was designed to assess the different causes of hemoptysis in the pediatric age group and the relative importance of the different diagnostic modalities employed in an Egyptian population cohort.

Design: A retrospective analysis of 104 pediatric patients admitted with hemoptysis at the Guiza Chest Hospital in Egypt over a period of 2 years.

Results: The study included 71 boys and 33 girls with male to female ratio of 2.1:1 and mean age 11.04 years (SD ±2.34). Acute lower respiratory infection (46%), bronchectasis (32%), mitral valve disease (9%), and collagen vascular diseases (5%) accounted for most causes of hemoptysis. In contrast to adult studies, active tuberculosis was a rare finding (1.9%). HRCT scan was the most sensitive diagnostic test when employed alone, with a positive yield of 57%. When combining a CT study together with a bronchoscopy, the positive yield increased to 78%.

Conclusions: Hemoptysis is an uncommon symptom in childhood, with a spectrum of etiology distinct from adult populations. Acute lower respiratory infection is the commonest cause of hemoptysis in childhood followed by bronchectasis. Rheumatic mitral valve disease is still an established cause of hemoptysis in Egyptian children. The combined use of bronchoscopy and chest CT has the best yield in evaluating hemoptysis.