Abstracts: Poster Sessions

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FOREIGN BODY MISDIAGNOSED AS ASTHMA
L. Ariza-Loaiza, G. Calixto, M.D., S. Gonzalez, M.D., C. Cansado, M.D., University Hospital Monterrey, N.L., Mexico.
A 4 year old boy was referred to us with recurrent upper respiratory infection. At the age of four he began with nasal obstruction, mucous rhinorrhea, nocturnal cough, productivity of white-yellow sputum, wheezing at night and occasional fever. He was mistakenly recovered on day 4 of symptomatic treatment. His pediatrician found respiratory wheezing and prescribed nebulizer and subcutaneous salmon ASW. He was followed-up and persisted with wheezing. A sinus x-ray showed maxillary sinuses treated with antimicrobial and lobar atelectasis. A chest x-ray confirmed the diagnosis of bronchial asthma. Changes consistent with chronic rhinorhinitis were found at the bronchoscopy. Auscultation of the lungs revealed bilateral inspiratory and expiratory wheezing. A nasal cytology showed PMN and intracellular bacteria. His PCP showed severe obstructive and moderate restrictive disease. A water-soluble film revealed mucoperiosteal thickening of the maxillary sinus, and opacity in the etiopathologic lesion. The chest x-ray showed an atelectasis of the upper segment of the right lung and a foreign body (a nail) in its middle segment, which was subsequently recovered by bronchoscopy.

The patient was readmitted with apical pattern and bilateral inspiratory wheezing. A chest x-ray showed a normal control. PCP was almost normal, neither the parents nor the child could explain how the foreign body reached the respiratory tree. The patient is now completely asymptomatic.

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CHANGES IN SERUM POTASSIUM IN ASTHOMATIC CHILDREN RECEIVING NEBULIZED ALBUTEROL. R. Cervino, M.D., E. Patino, M.D., A. Nava, M.D., G. Arreguin, M.D., K. Garcia, M.D., C. Lopez, M.D., Mexico City, Mexico.
INTRODUCTION: Hyponatremia is a secondary effect described with the use of albuterol. Prospective, longitudinal, observational end comparative study of several cohorts was designed in order to compare the serum potassium of nebulized albuterol.
MATERIALS AND METHODS: 23 subjects with ages between 2 to 16 years with asthmatic crisis, who were admitted to the emergency room of the Instituto Nacional de Pediatría, were administered nebulized albuterol in children with weight of 10 kg and 2.5 mg in children over 10 kg. Samples of venous blood were taken to determine levels of K+ and potassium.
RESULTS: 11 male and 12 female of which 18 had mild acute asthma and 5 had moderate acute asthma. The initial K+ was 3.7 to 5.6 mmol/l (mean 4.46), 60 minutes after was 3.3 to 4.7 mmol/l (mean 4.1), with decreased of 0.3 to 1.0 mmol/l (p<0.01). The initial 
P+ was between 7.34 and 7.48 (mean 7.39) and post 7.34 to 7.46 (mean 7.38).
CONCLUSIONS: Nebulized albuterol in doses from 1 to 2.5 mg decreases the serum potassium in a statistical significant way of 0.03 mmol/l 60 minutes after the administration.

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KHI GUIDELINES' (KHI-QG) IMPACT ON ASTHOMATIC PATIENTS' TREATMENT IN MEXICO.
Insights into the pathophysiology of asthma during the last decade, the importance of inflammation become obvious and early use of corticosteroids is indicated. Accordingly revised therapeutic guidelines were published in the US in 1995 and in Mexico in 1996. Purpose: to evaluate the asthma management of Mexican allergists, the KHI-QG's impact and to compare Mexican and US practices. Methods: a questionnaire used among US allergists was translated into Spanish and sent to Mexican colleagues. Results: 67 (13%) in US questionnaires were returned. To evaluate the asthma patient KHI (1990) use a classification of severity. KHI (73) use pulmonary function tests and 57% (30) take a lung X-ray. 84% (40) apply oximetry to a wheezing patient. 95% (69) use inhaled beta-agonists as first medication, albuterol/bid. Level first choice in 95% (93). Corticosteroids are used early in an acute attack by 82% (80): 72% give them erroneously inhaled; 14% (11) wait until admission. 120% (40) use atropine/beta blocked still often. 50% (50) changed their management after KHI-QG. 41% after medication publication. Some allergists still manage incorrectly.

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UNILATERAL HYPERLUCENT LUNG SYNDROME SIMULATING ASTHMA ON PRESENTATION. M.L. Perez, M.D., E. Gonzalez, M.D. and M.J. Schi, M.D., Rochester, Minnesota.
Case: a 4 year-old boy presented with a 6-month history of cough and chronicity of breath (SCB). Chest X-ray revealed a large, rounded mass with a solid mass and a clear lung field. Past medical history was significant for SCB with exercise. Family history was negative for snoring and asthma. Physical examination revealed a healthy appearing female with a normal chest and normal lung fields. Chest X-ray revealed a large, rounded mass with a clear lung field. Diagnosis of unilateral hyperlucent lung syndrome was made. CBC and chemistries were normal. RASTs to common allergens were negative. CT scan revealed a short axis of the mass in the left lung field. There was improvement of the mass with several courses of antibiotics. CT scan revealed unilateral hyperlucent lung syndrome. The patient was started on a short course of oral steroids. Bilateral nodules and tracheal deviation were noted.

With little change in her symptoms, repeat CT scan revealed unilateral hyperlucent lung syndrome. The patient was then referred to Mayo for further evaluation and treatment. PFTs were repeated and the results showed an improvement of the obstructive process. BO should be suspected in the following circumstances: 1) persistent wheezing or cough after acute pneumonia, 2) prolonged isolated crackles or wheezing or prolonged auscultatory shadows after acute pneumonia, 3) hyperlucent lung syndrome, and 4) respiratory symptoms with a history of BO. The patient was started on BO.

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