A Long-Term Follow-up Study of Childhood Bronchiectasis

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Objective: This study represents the experience of a tertiary care center in Saudi Arabia on non-cystic fibrosis bronchiectasis.

Method: A retrospective review of all patients with confirmed Non-Cystic Fibrosis (Non-CF) bronchiectasis by chest x-ray and or CT chest in a pulmonary clinic for the period 1993-2005 at a tertiary care center in Riyadh.

Result: A total of 151 cases were diagnosed as Non-CF bronchiectasis. Seventy-five (49.7%) were males, 76 (50.3%) were females. Hundred forty-eight (98%) are alive and three (2%) died. The southwestern regions constituted 72 (50%) of the cases. There is a period (5±3.2) years between the start of symptoms and the diagnosis of bronchiectasis. More than two-third of the patients had cough, tachypnea, wheezing, sputum production and failure to thrive. Ninety-one (60%) had associated disease: pulmonary diseases in 48 (32%), immunodefficiency in 27 (18%), CNS in 18 (12%), cardiac in 12 (8%), and asthma in 103 (68%) of the patients. Left lower lobes was commonly involved in 114 (76%). Sixty-eight (67%) was found to have sinusitis. Forty-nine (32%) developed gastroesophgeal reflux (GER). Hemophilus influenza was cultured in 56 (37%); strept pneumoniae in 25 (17%), and pseudomonas aeruginosa in 24 (16%) of the patients. Eighty percent of the patients who had pulmonary function test had abnormal changes. Disease progression was related to development of symptoms before 5 years of age, persistent atelectasis, and right lower lobe involvement ($p < 0.05$).

Conclusion: Non-CF bronchiectasis is a common problem in Saudi Arabia. Early recognition and institution of treatment with proper vaccination of available anti-bacterial and anti-viral vaccines are encouraged to prevent progression of the disease.

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