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Title: Diagnostic value of flexible bronchoscopy in persistent and recurrent wheezing of infancy

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Body: Persistent or recurrent wheezing are common problems in infancy.The aim of this study is to evaluate the diagnostic value of flexible broncoscopy(FB) and analyze its results in infants with persistent or recurrent wheezing. MATERIAL-METHOD:Ninety-six wheezy infants who had been performed FB between 1999 and 2011were included in this study. Demographic features, radiological, laboratory and bronchoscopic findings were analyzed. RESULTS:Sixty-six patients were male and the median age at FB date was 0.9 (0.6-1.5) years. Median age at symptom onset was 3 (1-6) months.Twenty-one patients had persistent and 75 had recurrent wheezing. Fifty-five patients had regular asthma therapy before the procedure.Thirty patients had atelectasis on radiological imaging.FB revealed a diagnosis in 64 patients.Functional abnormalities in 43 patients (13 tracheobronchomalacia, 10 bronchomalacia, 7 tracheal dyskinesia, 6 tracheomalacia, 4 laryngotracheomalacia, 3 laryngotracheobronchomalacia), structural abnormalities in 8 patients (5 bronchial stenosis, 2 tracheal stenosis, 1 abnormal bronchial anatomy) and foreign body in the airways in 1 patient were determined.Microbiological investigations of the bronchoalveolar lavage (BAL) fluid revealed CMV PCR positivity in 8 patients and bacterial infections in 4. BAL fluid microbiological investigations demonstrated various bacterial agents in 37 patients.Also, accompanying gastrooesophageal reflux in 28 shown by lipid laden macrophages in BAL fluid. Functional and structural airway abnormalities must be kept in mind in the differential diagnosis of infants with persistent or recurrent wheezing.FB is a diagnostic tool in these patients and avoids redundant medications.