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Autores	Maíra Andrade Pascoal, Fernando Augusto Lima Marson, Ilma Aparecida Paschoal, Carlos Emílio Levy
Autor (es) USF	Fernando Augusto Lima Marson
Autores Internacionais	
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Resumo	Introduction: Cystic fibrosis (CF) presents with progressive and chronic deterioration of lung function due to inflammation and colonization/infection of the lungs. This study evaluated spirometry and colonization/infection with *Staphylococcus aureus* and/or *Pseudomonas aeruginosa* over a 24-month follow-up period. Methods: A total of 52 CF patients were studied with spirometry: forced vital capacity (FVC), forced expiratory volume in one second of FVC (FEV_1), FEV_1/FVC and forced expiratory flow between 25% and 75% of FVC ($FEF_{25–75\%}$). Colonization/infection was evaluated as predominantly *S. aureus*, predominantly *P. aeruginosa* or concomitance of these microorganisms. Results: In CF, there was a higher prevalence of p.Phe508del/*p*.Phe508del genotype (16/52; 30.8%) and female gender (33/52; 63.5%). Spirometry (% predicted) markers worsened for the following groups over the 24-month period: (i) male: FVC, FEV_1, FEV_1/FVC, $FEF_{25–75\%}$; (ii) female: FVC%, FEV_1, (iii) predominantly *S. aureus*: FVC, FEV_1, FEV_1/FVC, $FEF_{25–75\%}$; (iv) predominantly *P aeruginosa*: FEV_1/FVC; (v) concomitant *S. aureus* and *P. aeruginosa*: FVC, FEV_1. Age correlated with reduction of FVC(Liter) (Rho = −0.50) and FEV_1(Liter) (Rho = −0.46). Pancreatic insufficiency and severe cystic fibrosis transmembrane regultador (*CFTR*) mutations were associated with deteriorating lung function. Conclusion: In CF, deterioration of lung function as evaluated by spirometry was continuous and varied according to sex, pancreatic insufficiency, and severe *CFTR* mutations. No differences were observed between groups in terms of

	predominant type of bacteria, but the reduction of spirometry parameters was significant in the predominantly *S. aureus* and concomitant infection groups.
Fomento	