Title: Hypersensitivity pneumonitis by feather duvet: A series of Vall d’Hebron Hospital

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Body: INTRODUCTION: Exposure to avian proteins is a frequent cause of Hypersensitivity Pneumonitis (HP). We describe a series of NH secondary to exposure to feather duvet. MATERIAL AND METHODS: In the outpatient clinic of interstitial lung disease during the years 2004-2011, 28 patients were diagnosed with HP with definite causality from exposure to feathers contained in the feather duvet. Diagnosis criteria: diagnosis of NH, contact with feather duvet coincident with the onset of symptoms; IgG + and / or positive bronchial challenge test (BCT). In neither case had history of exposure to any agent known as a producer of NH. RESULTS: 15 male; mean age 59 years. Presentation was acute in 5, subacute in 4 and chronic in 19 cases. Auscultation was normal in 10 patients, revealed crackles in 17 and wheezing in 1. FVC mean was 67.57%, DLCO 52.60%. IgG+ in front of avian antigens in 11/24, and in front of fungi in 16/24. A culture of feather duvet was positive for fungi in 6 cases. The BCT was positive in 8/11 in front of avian antigens and 4/7 against fungi. Pathological study was performed in 16/28 patients, showing a characteristic pattern of subacute NH in 6/16, consistent with NH in 8/16 and UIP pattern in 2/16. Surgical lung biopsy (BPQ) was performed during the study in 7 cases and revised from the samples of another center in 7. During the follow up lung transplantation, was performed in 4 patients (2 of them already had previous BPQ).

CONCLUSIONS: Our study confirms that exposure to a minimum but persistent agent may be sufficient for disease development. Diagnosis at an advanced stage of chronic NH is common. Project funded by FIS PI1001577 (ISCIII) and SEPAR 2010.