

## CLINICAL AND PROGNOSTIC ASPECTS IN HYPERSENSITIVITY PNEUMONITIS

Author(s): Capră Dumitru<sup>1</sup>, Calaraș Diana<sup>2</sup>

1. student anul VI, grupa 1720, facultatea Medicină 1, USMF „Nicolae Testemițanu”
2. Dr. șt. med., conferențiar universitar, Disciplina de pneumologie și alergologie, USMF „Nicolae Testemițanu”

### Introduction

Hypersensitivity pneumonitis (HP) is a type of interstitial lung disease that occurs following sensitization to an inhaled organic antigen. Although previously classified as acute, subacute and chronic, this classification has not proven to be a good prognostic tool. Therefore, lately the use of fibrotic hypersensitivity pneumonitis (FHP) and nonfibrotic hypersensitivity pneumonitis (NFHP) classification is recommended.

### Purpose

To study the differences in clinical, diagnostic and prognostic features in patients with fibrotic and nonfibrotic hypersensitivity pneumonitis.

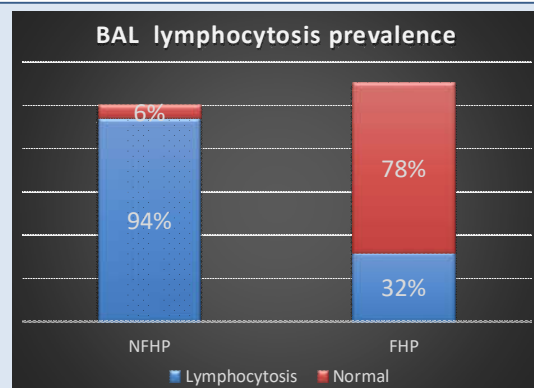
### Material and methods

We have identified 39 patients, with mean age  $47 \pm 15$  years diagnosed with HP in Chiril Draganiuc Institute of Phtisiopneumology during 2017-2021.

Patients were analyzed by:

- antigen exposure history,
- imaging data,
- bronchoalveolar lavage (BAL),
- functional respiratory tests.

### Results

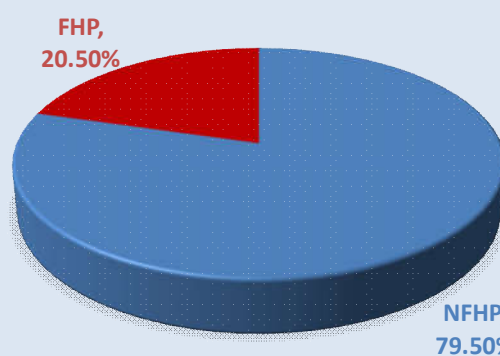


Analysis of BAL data shows a pronounced alveolar lymphocytosis with values above 40% lymphocytes in 94% cases, and only 32% in the fibrotic forms.

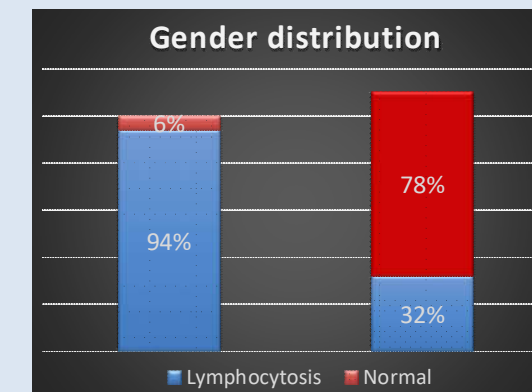


Fibrotic HP

NFHP AND FHP DISTRIBUTION



Non- Fibrotic HP

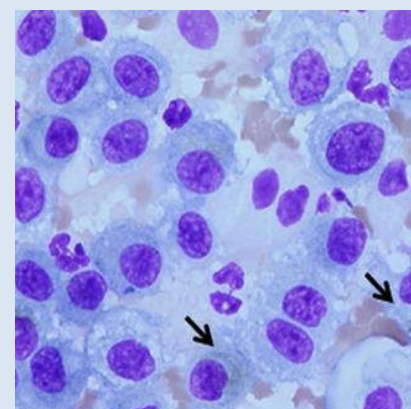


Comparative analysis of the groups identified a statistically significant difference by age and gender, with the non fibrotic HP group being dominated by mostly young patients (mean age  $35 \pm 6.1$  years) and women (100%), compared to the subgroup of patients with fibrotic HP, with a mean age of  $51 \pm 11.3$  years, and where women accounted for 73%,  $p < 0.05$ .

### Conclusions

Table 1. Main differences in fibrotic and nonfibrotic form.

Non-fibrotic PH	Fibrotic PH
1. Female predominance	1. Less often the antigen can be identified
2. Young age individuals	2. Allergen is rarely identified
3. Allergen often can be identified	3. Fibrotic changes in imaging
4. High degree of reversibility to normal and respectively favorable prognosis with timely treatment	4. Important functional sequelae



Another difference was the documentation of a trigger antigen in the non-fibrotic HP group, being possible in 69,2% cases, and only 35,9% cases in the fibrotic form ( $p < 0.05$ ).

**Functional test** data showed no differences in FVC, FEV1, TLC, RV or DLCO between groups, but patients in the non-fibrotic group showed improvement of functional data to normal values in about 100% cases, compared to those in the fibrotic group who reached normal values of FVC, FEV1, RV and TLC in 15.3% cases, DLCO remained lower than normal in about 87.2% cases,  $p < 0.05$ .