Supplementary material

Bylica J, Waligóra M, Owsianka I, et al. Time from symptom onset to final diagnosis of pulmonary arterial hypertension in Polish patients. Kardiol Pol. 2020; 78: 750-752. doi:10.33963/KP.15344

Time from symptom onset to final diagnosis of pulmonary arterial hypertension in Polish patients.

Jan Bylica*[1], Marcin Waligóra*[2], Izabella Owsianka[1], Jerzy Król[1], Piotr Podolec[2], Grzegorz Kopeć[2]

[1] Jagiellonian University Medical College Faculty of Medicine, Students' Scientific Group of Pulmonary Circulation and Thromboembolic Diseases, Kraków, Poland

[2] Jagiellonian University Medical College Institute of Cardiology, Department of Cardiac and Vascular Diseases, John Paul II Hospital in Krakow, Kraków, Poland

***- Both authors equally contributed to the study**

Correspondence to:

Grzegorz Kopeć, MD, PhD,

Jagiellonian University Medical College Institute of Cardiology, Department of Cardiac and Vascular Diseases, John Paul II Hospital in Krakow, Kraków, Poland

ul. Prądnicka 80, 31-202 Kraków, Poland, phone: +48 12 614 33 99, email: grzegorzkrakow1@gmail.com

Characterization of patients

Medical records and interviews were used to characterize patients. The following information was gathered: diagnosis based on the clinical classification of pulmonary hypertension (PH) [1], date of diagnosis, and World Health Organization Functional Class (WHO-FC) at the time of enrollment and diagnosis. We also asked about the place of residence (urban vs rural) and the level of education (university vs non-university).

Questionnaire

Patients were asked to complete a questionnaire composed of 23 items. Both open-ended and closed-ended questions were used to assess (1) socioeconomical status of patients, (2) first symptoms of PH concerning the date of occurrence, their type, and severity according to the WHO classification, (3) delay between first symptoms and first medical contact and between first medical contact and the final diagnosis (4), specialty of the physician who was contacted first by the patient, and who made the suspicion of PH, (5) number of medical contacts between the onset of symptoms and the final diagnosis of pulmonary arterial hypertension (PAH). Additionally, every patient was asked to provide symptoms from the list of typical PH manifestations [1] including dyspnea, fatigue, tiredness, dizziness, syncope, dry cough, chest pain, palpitations, bloated feeling, ankle swelling, and abdominal distension.

Patients, who delayed FMC were asked to choose one or more of the following reasons: (1) no limitations to daily physical activity, (2) expectation of symptom(s) withdrawal, (3) assignment of the manifestations to concomitant conditions, (4) lack of time.

Statistical analysis

Continuous variables were reported as medians (interquartile range [IQR]) and categorical variables as numbers and percentages. The Mann–Whitney test was used for the comparison of continuous variables between two groups and the $\chi 2$ test was used for the comparison of categorical variables between two groups. The forward stepwise linear regression models were used to assess the relationships between patient-related and total delay in PAH diagnosis and its potential causes. The following potential causes of diagnostic delay were analyzed: number of comorbidities, age, level of education (higher vs non-higher), place of residence (urban vs rural) .Variables were included in the model if they had $P<0.2$ and were considered significant when $P<0.05$.

Socioeconomical status

Most patients lived in urban areas (n=27; 54%) and had a non-university education (n=42; 84%). Most of them were married (n=37; 74%), the others were single (n=6; 12%), widowed (n; =4; 8%) and divorced (n=3; 6%). Most of patients declared to have a family support (n=44; 88%).

The occupational status of the study sample was as follows: nearly half (n=24; 48%) patients were on a disability pension due to PH, 17 (34%) were retired and n=6; (12%) were employed and 3 (6%) patients were unemployed.

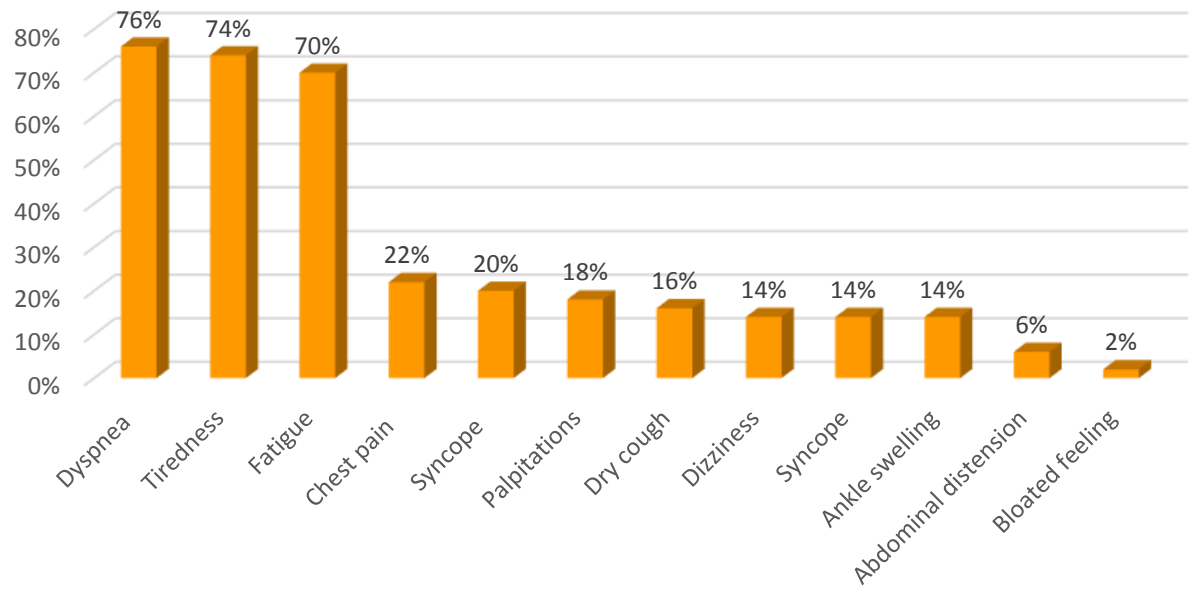
Reference:

[1] Galiè N, Humbert M, Vachiery JL, et al. 2015 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension. Eur Heart J. 2016;37:67-119

Supplementary Table S1. Baseline characteristics of the study group

Whole group [n]	50
Age [years]	57 (45.5-71)
Sex (females)	31 (62%)
Marital status	
Married [n, (%)]	37 (74%)
Single [n, (%)]	6 (12%)
Widowed [n, (%)]	4 (8%)
Divorced [n, (%)]	3 (6%)
Education	
Non-University [n, (%)]	42 (84%)
University [n, (%)]	8 (16%)
Place of residence	
Urban [n, (%)]	27 (54%)
Rural [n, (%)]	23 (46%)
Etiology	
IPAH [n, (%)]	40 (80%)
CTD-PAH [n, (%)]	10 (20%)
Current WHO Functional Classification	
WHO-FC I [n, (%)]	1 (2%)
WHO-FC II [n, (%)]	22 (44%)
WHO-FC III [n, (%)]	25 (50%)
WHO-FC IV [n, (%)]	2 (4%)

IQR-Interquartile Range; IPAH-Idiopathic Pulmonary Artery Hypertension; CTD-PAH-Pulmonary arterial hypertension associated with connective tissue disease; WHO–World Health Organization



Supplementary Figure S1. First symptoms of PAH in the analyzed sample; PAH-Pulmonary arterial hypertension