ILD: how big is the problem? How can you spot it and how should you monitor it?

P1 GLOBAL OVERVIEW OF INCIDENCE AND PREVALENCE OF INTERSTITIAL LUNG DISEASE: A SYSTEMATIC LITERATURE REVIEW

R Gupta, A Kotei, A Morgan, PM George, JK Quint. Imperial College London, London, UK

10.1136/thorax-2021-BTSabstracts.111

Introduction Interstitial lung diseases (ILD) are a diverse group of pulmonary fibrotic and inflammatory conditions. The global burden of ILD is largely unknown, in part because of differences between countries in diagnosis and in coding practices¹. Reviews to date have therefore tended to be limited in geographical scope and focused on individual ILDs. Our aim was to systematically review evidence for ILD prevalence and incidence on a global scale.

Methods A systematic search of Medline and Embase was conducted to identify relevant articles reporting the incidence and/or prevalence of individual ILD subtypes. The search was limited to observational studies published between 2015 and 2020 in English, with articles independently screened by two reviewers. An adapted Newcastle-Ottawa scale was used to assess quality and risk of bias.

Results Of 8,560 articles, 51 studies were included. Geographically, most studies were from Asia (47.1%) and Europe

(43.1%). Significant heterogeneity was noted in the incidence and prevalence (figure 1) of ILDs between different countries. These variations are largely attributed to the diversity of the underlying population and differences in data sources used. For example, the prevalence of systemic sclerosis ILD ranged from 30% in Europe to 71% in Asia, silicosis ranged from 0.02% in the USA to 37% in Brazil. IPF was the most reported ILD, the range of prevalence was 8.5 to 38.8 per 100,000 persons, and incidence was 2.4 to 48.5 per 100,000 persons-years, across regions.

Discussion There have been few reviews investigating the epidemiology of ILDs overall or by subtypes. ILD publications differed by region, for example, more studies from Asia explored occupational ILDs, whereas more European studies reported on autoimmune ILDs. With an increasing research interest in progressive fibrosing ILDs, there is a need to understand the global burden of ILD and highlight unmet needs.

REFERENCE

- King TE. *Am J Respir Crit Care Med*. 2005;**172**:268–279.

P2 GEOGRAPHICAL VARIATION OF INTERSTITIAL LUNG DISEASE IN THE NORTHERN TRUST

M Donaghy, S Gilmour, E Murtagh, P Minnis. Antrim Area Hospital, Interstitial Lung Disease Service, UK

10.1136/thorax-2021-BTSabstracts.112

Aims There are geographical variations in Interstitial Lung disease, particularly sarcoidosis, that may shed light on aetiology and aid service development. The Northern Trust services a population of all most 471'000 people across a geographic area of 1,733 square miles making it the largest geographical trust in Northern Ireland. By exploring this unique attribute, we sought to define the geographical prevalence of Interstitial Lung Disease (ILD) and investigated whether this was affected by population density. Secondary aims included quality improvement in service provision.

Methods We identified 712 patients attending the ILD clinic within the last 12 months. Patients were classified on the basis of CT imaging and electronic care record review. Baseline demographic data and geographic location (Postcode) were collated and compared to recent census data to define population density and crude rates of prevalence. Average travel distance for patients attending clinic twice a year were calculated and compared to a proposed satellite clinic closer to patient homes.

Results Of the 712 patients included in analysis; 171 (24%) Sarcoidosis, 157 (22.1%) definite or probable UIP, 67 (9.4%)

Abstract P1 Figure 1 Prevalence stratified by underlying population and reporting units

IIP, idiopathic interstitial pneumonia; IPF, idiopathic pulmonary fibrosis; NSIP, nonspecific interstitial idiopathic pneumonia; DIP, desquamative interstitial pneumonia; OP, organizing pneumonia; RA-ILD, rheumatoid arthritis ILD; SSC-ILD, systemic sclerosis ILD; PM/DM-ILD, polymyositis/dermatomyositis; MTCD, mixed connective tissue ILD; HP, hypersensitivity pneumonitis ILD; LAM, lymphangioleiomyomatosis; PLCH, pulmonary Langerhans cell histiocytosis

Abstract P2 Figure 1