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Two sides of the same coin? A review of the similarities and differences between idiopathic pulmonary fibrosis and rheumatoid arthritis-associated interstitial lung disease

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Idiopathic pulmonary fibrosis and rheumatoid arthritis-associated interstitial lung disease have common genetic risks, similar clinical courses and common radiographic features. This review explores the similarities and differences between these diseases. https://bit.ly/2UlaZqs

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ABSTRACT Rheumatoid arthritis associated interstitial lung disease (RA-ILD) and idiopathic pulmonary fibrosis (IPF) are distinct diseases; however, they share several clinical, radiographic and genetic features. For instance, usual interstitial pneumonia (UIP), which is an ILD pattern required for a diagnosis of IPF, is also the most common ILD pattern in RA-ILD. The presence of UIP in RA-ILD is a poor prognostic sign with outcomes similar to those seen in IPF. The recent finding of a shared genetic susceptibility between IPF and RA-ILD has sparked additional interest in this relationship. This review outlines these similarities and differences in clinical presentation, appearance and outcomes in RA-ILD and IPF.

In addition, this review highlights previous research in molecular biomarkers in both conditions, exploring areas of overlap and distinction. This focus on biomarkers in IPF and RA-ILD aims to highlight potential areas of discovery and clues to a potential shared pathobiology through investigation of novel molecular markers or the repurposing of biomarkers from one condition to the other.

The drive to better understand RA-ILD by leveraging our knowledge of IPF is underscored by our divergent treatment paradigms for these conditions and the concern for potential harm. As a result of advancing our understanding of the links between IPF and RA-ILD, current strategies for diagnosis, screening and treatment of ILD may fundamentally change in the coming years. Until then, clinicians face difficult clinical questions regarding the co-management of the articular disease and the ILD in RA.