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Probable usual interstitial pneumonia pattern on chest CT: is it sufficient for a diagnosis of idiopathic pulmonary fibrosis?

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Except when the final diagnosis is IPF, idiopathic interstitial pneumonia (IIP) patients with a probable usual interstitial pneumonia (UIP) pattern on chest CT have a longer survival time and time to first acute exacerbation than those with a UIP pattern http://bit.ly/2FOJa2F

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ABSTRACT Recent studies have suggested that in patients with an idiopathic interstitial pneumonia (IIP), a probable usual interstitial pneumonia (UIP) pattern on chest computed tomography (CT) is sufficient to diagnose idiopathic pulmonary fibrosis (IPF) without histopathology.

We retrospectively compared the prognosis and time to first acute exacerbation (AE) in IIP patients with a UIP and a probable UIP pattern on initial chest CT.

One hundred and sixty IIP patients with a UIP pattern and 242 with a probable UIP pattern were identified. Probable UIP pattern was independently associated with longer survival time (adjusted hazard ratio 0.713, 95% CI 0.536–0.950; p=0.021) and time to first AE (adjusted hazard ratio 0.580, 95% CI 0.389–0.866; p=0.008). In subjects with a probable UIP pattern who underwent surgical lung biopsy, the probability of a histopathological UIP pattern was 83%. After multidisciplinary discussion and the inclusion of longitudinal behaviour, a diagnosis of IPF was made in 66% of cases. In IPF patients, survival time and time to first AE were not associated with CT pattern. Among subjects with a probable UIP pattern, compared to non-IPF patients, survival time and time to first AE were shorter in IPF patients.

In conclusion, IIP patients with a probable UIP pattern on initial chest CT had a better prognosis and longer time to first AE than those with a UIP pattern. However, when baseline data and longitudinal behaviour provided a final diagnosis of IPF, CT pattern was not associated with these outcomes. This suggests diagnostic heterogeneity among patients with a probable UIP pattern.