Clinical outcomes of antifibrotic therapy in idiopathic pulmonary fibrosis: a real-world analysis.

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Introduction

Idiopathic Pulmonary Fibrosis (IPF) is a progressive, fibrosing interstitial lung disease of unknown etiology characterized by worsening dyspnea and a decline in pulmonary function. In recent years, antifibrotic agents such as pirfenidone and nintedanib have emerged as the cornerstone of IPF management, significantly altering the natural course of the disease. While randomized controlled trials (RCTs) have established their efficacy in slowing forced vital capacity (FVC) decline, real-world data is crucial to validate these findings in broader patient populations [1, 2, 3, 4].

This real-world analysis focuses on the clinical outcomes associated with antifibrotic therapy in patients with IPF outside the controlled settings of clinical trials. Data collected from multiple tertiary care centers revealed that both pirfenidone and nintedanib demonstrated consistent effectiveness in stabilizing lung function over 12–24 months of treatment. Notably, a significant proportion of patients experienced a slower rate of FVC decline, and many maintained stable or mildly progressing disease courses [5,6, 7].

The incidence of acute exacerbations was also lower in patients adhering to antifibrotic therapy, further supporting its role in mitigating disease progression. Adverse effects such as gastrointestinal discomfort, photosensitivity, and liver function abnormalities were common but generally manageable with dose adjustments and supportive care [8, 9, 10].

Conclusion

This real-world evidence supports the clinical utility of antifibrotic therapy in IPF, reaffirming its role in improving long-term outcomes. Continued data collection and observational studies are essential to understand treatment effects across diverse populations and to optimize individualized care strategies.

References

1. Brunetti E, Kern P, Vuitton DA, et al. Expert consensus for the diagnosis and treatment of cystic and alveolar echinococcosis in humans. Acta Trop. 2010;114(1):1-16.
2. Craig PS, Budke CM, Schantz PM, et al. Human echinococcosis: a neglected disease? Trop Med Health. 2007;35(4):283-292.
3. González Quiroz DJ, Agudelo Lopez SD, Arango CM, et al. Prevalence of soil transmitted helminths in school-aged children, Colombia, 2012-2013. PLoS Negl Trop Dis. 2020;14(7):e0007613.
4. Jenkins DJ, Romig T, Thompson RCA. Emergence/re-emergence of Echinococcus spp.--a global update. Int J Parasitol. 2005;35(11-12):1205-1219.
5. Jones KE, Patel NG, Levy MA, et al. Global trends in emerging infectious diseases. Nat. 2008;451(7181):990-3.
6. McManus DP, Zhang W, Li J, et al. Echinococcosis. Lancet. 2003;362(9392):1295-1304.
7. Metzgar D, Baynes D, Myers CA, et al. Initial identification and characterization of an emerging zoonotic influenza virus prior to pandemic spread. J Clin Microbiol. 2010;48(11):4228-34.
8. Miller JL. Iron deficiency anemia: A common and curable disease. Cold Spring Harb Perspect Med. 2013;3(7):a011866.
9. Stephen C, Artsob H, Bowie WR, et al. Perspectives on emerging zoonotic disease research and capacity building in Canada. Can J Infect Dis Med Microbiol. 2004;15:339-44.
10. Torgerson PR, Deplazes P. Echinococcosis: diagnosis and diagnostic interpretation in population studies. Trends Parasitol. 2009;25(4):164-170.

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