

## Editorial

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In recent years, interventional pulmonology has emerged as a transformative subspecialty within pulmonary medicine, bringing new hope and innovative solutions for patients with complex respiratory diseases. This discipline focuses on the diagnosis and treatment of lung disorders through minimally invasive procedures, significantly improving the quality of life for many patients and reducing the need for more aggressive surgical interventions.

In addition to clinical benefits, interventional pulmonology has contributed to the optimization of healthcare resources. Minimally invasive procedures often require less hospitalization and recovery time, resulting in a lower economic burden on healthcare systems and greater efficiency in patient care.

In this regard, the first article of this issue discusses the quality standards of cryobiopsy, an advanced technique in modern medicine that has become a crucial tool for diagnosing various lung diseases. This methodology not only enhances the quality of the samples

obtained but also minimizes tissue damage and complications for the patient. With its increasing adoption, cryobiopsy is revolutionizing the field of pulmonary pathology, providing faster and more accurate diagnoses, and thereby improving treatment prospects for patients.

In the field of airway diseases, significant advancements have been made in the treatment of conditions such as excessive dynamic airway collapse and tracheobronchomalacia. These diseases involve the abnormal collapse of the trachea or bronchi during breathing, resulting in symptoms like chronic cough, difficulty breathing, and recurrent respiratory infections. Dr. Adnan Majid et al. provide new insights on this topic in the second article of this edition.

Continuing in this same field, one of the most promising developments, as highlighted in the third article, has been the use of 3D printed tracheobronchial stents. These devices are custom-designed to precisely fit the patient's airways, offering an innovative alternative to

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traditional stents that may not provide optimal fit. 3D printing technology allows for the creation of stents with complex geometries and personalized designs, improving stabilization and support for different airways disorders.

Finally, the last article in this issue discusses the role of interventional pulmonology in the diagnosis and management of undiagnosed pleural effusions. Through minimally invasive procedures, employing advanced techniques that combine diagnostic accuracy with therapeutic efficacy, interventional pulmonologists can swiftly diagnose the underlying causes of pleural effusions and employ innovative therapeutic strategies to alleviate symptoms and improve the quality of life for patients. By leveraging state-of-the-art technology

and expertise, lowercase continues to advance the field, offering new hope and improved care for individuals affected by pleural diseases.

In conclusion, interventional pulmonology represents a significant advance in the field of pulmonary medicine, offering innovative and less invasive solutions for the diagnosis and treatment of complex respiratory diseases. Its positive impact on patients' quality of life and the efficiency of the healthcare system is undeniable, and its future promises even more advancements that will transform the way we approach lung diseases. The key will be to continue promoting specialized training and research, ensuring that this discipline continues to evolve and benefit those who need it most.