



## **Original** article

## Validity of High-resolution computed tomography in the diagnosis of lung lesions

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## ABSTRACT

High-resolution computed tomography (HRCT) has become an indispensable tool in the diagnosis of lung lesions due to its excellent spatial resolution and multiplanar imaging capabilities. This diagnostic modality provides detailed information about the lung parenchyma, enabling the identification and characterization of various lung abnormalities.

In the evaluation of lung lesions, HRCT allows radiologists to differentiate between benign and malignant lesions based on their morphology, size, and enhancement patterns. It also aids in the detection and characterization of pulmonary nodules, ground-glass opacities, consolidation, and interstitial lung diseases. Additionally, HRCT can help determine the extent and distribution of lung lesions, which is crucial for treatment planning and monitoring disease progression.

The validity of HRCT in the diagnosis of lung lesions has been extensively studied, and it has demonstrated high sensitivity and specificity in detecting and characterizing various lung pathologies. Its ability to detect subtle abnormalities and its non-invasive nature make HRCT an invaluable tool in clinical practice. However, it is important to note that HRCT findings should be interpreted in conjunction with clinical history, physical examination, and other diagnostic tests to ensure accurate diagnosis and appropriate management.

**Keywords**: High-Resolution Computed Tomography, Lung Lesions, Diagnosis, Spatial Resolution, Multiplanar Imaging.

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