



AIMA Talk 20.6.2023: Lung Nodules in 30 Minutes – One page Summary

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Pulmonary nodule - well defined pulmonary parenchymal opacity < 3cm in size

Most lung nodules are incidentally detected and patients are asymptomatic.

Why Lung nodules

1. Lung nodules are common: ~ 30% of all CT chest
2. Lung nodules: an opportunity to cure lung cancer
3. National lung cancer screening program is expected by July 2025
4. Improved technology increases detection of nodules and allows evaluation

Current approach to lung nodule evaluation

Confirm any incidentally detected nodule with a dedicated CT chest with thin slices.

Assess the clinical context – Any infection or alternate diagnoses?

Search for previous imaging - partial or dedicated chest CT scan

Are there any High risk features? Lymphadenopathy, active or previous cancer, distant mets

Is this Incidental nodule, screen detected nodule or a clinical finding?

Clinicoradiological nodule risk assessment

Benign nodule/Surveillance/Biopsy

Role of FDG PET

FDG PET scan is useful for detection of extrathoracic metastasis and prevent unnecessary surgery
PET/CT is associated with clinically relevant false positive lymph nodes (Granulomatous disease (TB, Histoplasmosis, Sarcoidosis), Anthrasilicosis) and false negatives.

FDG PET scan not very useful in determining if nodule is benign or malignant, for small nodules < 8mm, ground glass nodules, thoracic lymph node metastasis

Establishing a tissue diagnosis: Peripheral lung nodule

Endobronchial ultrasound (EBUS) – Linear or Radial

CT guided transthoracic needle biopsy

Linear EBUS is well established in lymph node staging and radial EBUS can be performed at the same time.

Radial EBUS also has a much better safety profile compared to CT guided transthoracic biopsy. CT guided biopsy however has a better diagnostic yield compared to Radial EBUS peripheral lung nodule biopsy.

Surgical resection offers diagnosis and treatment for selected nodules but carries procedural risks.