

CT Chest: Incidental Lung Nodule

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Slides available for download at
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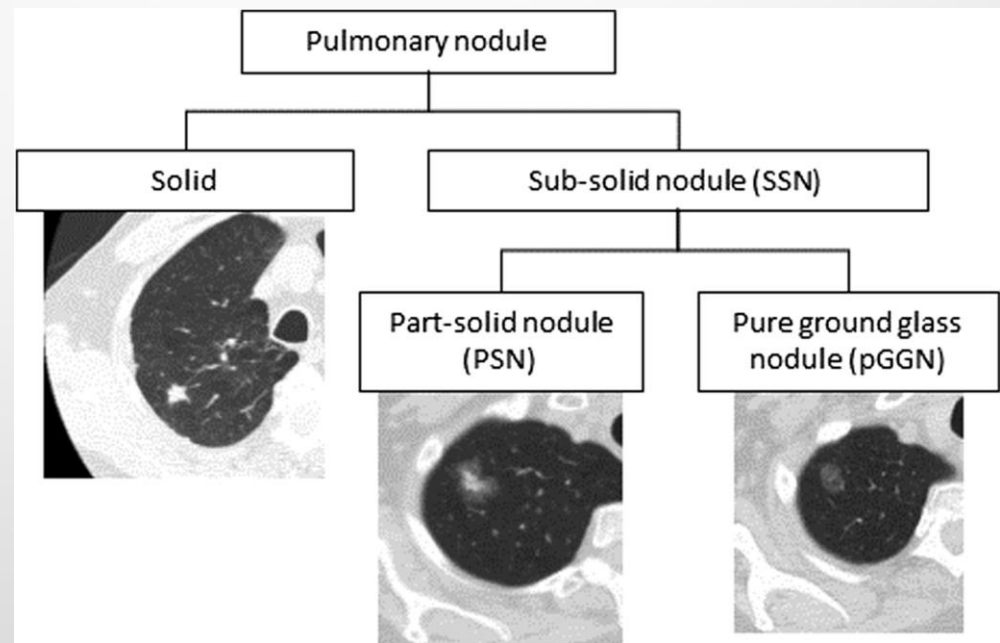
**Incidental
findings
can
kill
you!**



A Lung nodule is an opportunity to cure lung cancer

- Well defined pulmonary parenchymal opacity < 3cm in size

*Consolidation/other terminologies have specific radiological definitions



Nodule risk for lung cancer

- **Radiological characteristics:** Type, size, spiculation, architectural distortion
- **Clinical characteristics:** Smoking history, radiation exposure, family and past history
- **CT indication characteristics:** Incidental vs Symptomatic vs Screen detected

PET scan

- FDG PET scan is useful for detection of extra thoracic metastasis and prevent unnecessary surgery
- Not very useful in
 - Determination of nodule malignancy risk
 - Small nodules < 8mm
 - Ground glass nodules
 - Thoracic lymph node metastasis

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Preoperative Staging of Lung Cancer
with Combined PET-CT

New England Journal of Medicine 2009;361:32-9

Case Example

62 yo F, never smoker,
Asian, fit with shoulder
/neck pain

CT neck – 21mm RUL
nodule

Confirmed on CT Chest

No infective symptoms

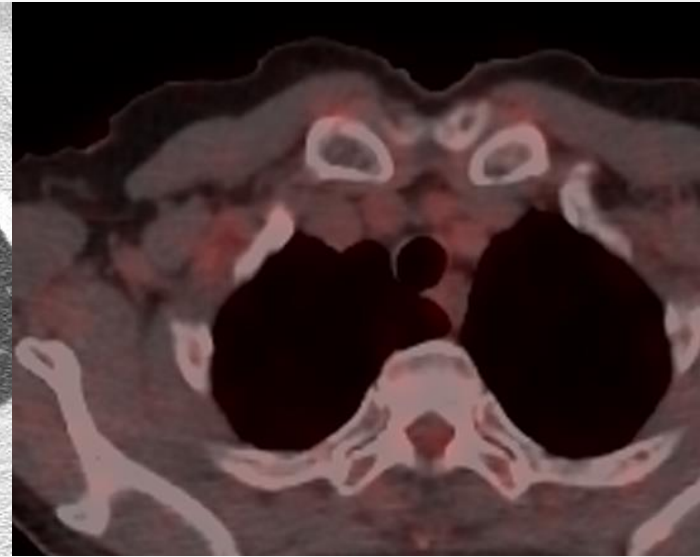
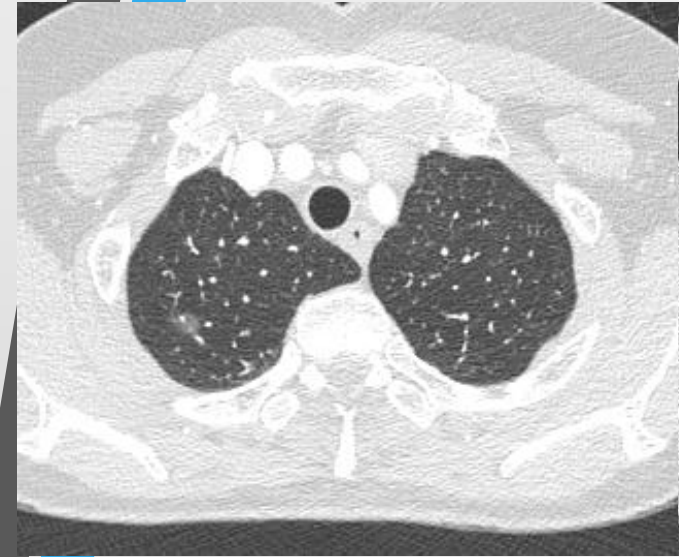
Persistent on short term
follow up CT.

Review of previous
imaging: CTA 8mm
incidental nodule in
2013!

2013

2021

FDG PET



Enlarging pure ground glass
nodule

Invisible on FDG
PET scan

Case Example

**CTFNA – Atypical
adenomatous
hyperplasia
(NOT CANCER, but
pre-invasive lesion)**

MDT recommendation:

- Path: Non Malignant
- Radiology: No invasive (solid) component
- Consider surveillance. Surgical option if patient keen

Case Example

Progress: VATS Wedge → Frozen section – Malignant
Intraoperative discussion with pulmonologist
Proceeded to lobectomy

Pathology: Malignant adenocarcinoma

Outcome: Cured by Lobectomy.

Summary

- Incidental lung nodules are a common and an opportunity for cure
- Nodule malignancy risk depends on multiple clinico-radiological factors

Practical tip

- If initial CT is non lung then confirm incidental lung nodule with CT chest
- If high clinical suspicion for infection then antibiotics and short term interval scan (6-8 weeks) is a reasonable first step before referral



Thank you

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