

Sept 19 2025

Question	Answer	Answer Name
For massive pleural effusion, should we drain that effusion before getting imaging?	This was answered in the talk (CT before drainage is fine).	Louise Wing
For massive pleural effusion, should we drain that effusion before getting imaging?	You can do a large volume aspirate for symptomatic relief but don't drain the effusion completely	Rachel Benamore
ctpa vs ct thorax with contrast. is the main diff is that ctpa is venous phase and ct thorax with contrast is both arterial and venous phase	CTPA is a CT Pulmonary arteriogram, so the images are acquired while contrast is in the pulmonary arteries. CT thorax with contrast is a generic term - any CT acquired with contrast on board, but it usually refers to a later acquisition at around 70 seconds. A (systemic) arterial phase is also often termed an aortogram and is most often used to look for dissection, aneurysm or bronchial artery hypertrophy.	Louise Wing
pleural calcifications - indicate benign disease, or can also be seen in mesothelioma?	pleural calcification is often benign but can be seen in mesothelioma also, usually because mesothelioma occurs in patients with asbestos plaques.	Louise Wing
Are the pleural findings in TB indistinguishable from malignant pleural disease on CT?	The most common presentation of pleural TB is a unilateral pleural effusion with benign features however it can less commonly present with pleural nodularity and cross anatomical borders	Louise Wing
any way of differentiating empyema from chronic effusion which can develop loculations?	Radiologically the appearances can be similar although oedema can be helpful (extra pleural oedema or split pleura sign). But ultimately the gold standard test is diagnostic aspiration.	Louise Wing
How does pleura enhancement in empyema is different from pleural thickening on CT?	In empyema, the pleura enhances and is also thickened on CT. The thickening is usually smooth rather than nodular.	Louise Wing
Why ctpa does not pick up pleural findings?	Because the pleura do not enhance during the pulmonary arterial phase, the pleura enhance later during venous phase.	Louise Wing

<p>If bedside ultrasound shows obvious pleural nodularity should they ideally be for thoracoscopy+ biopsy right away rather than waiting for chest drain+cytology that may be negative and then planning pleural clinic f/u weeks down the line?</p>	<p>Yes - if you think the most likely based on history/examination, although I think this is often balanced against what is available locally and urgency of offering the patient symptomatic relief.</p>	<p>Louise Wing</p>
<p>what does pleural plaques look like on ct?</p>	<p>soft tissue or calcified, well defined borders, typically with undercut or slightly rounded edges, predilection for the diaphragmatic pleura, rarely involves mediastinal pleural, fissures. They are termed symmetrically asymmetrical - which is a useful thing to look for on CXR - it means that the plaques may look different on each side of the chest but they are usually seen at a similar location. This is useful as if you see a possible plaque/nodule and don't see one on the other side, you should do a CT to make sure there isn't a lung cancer hiding amongst the plaques.</p>	<p>Rachel Benamore</p>
<p>When looking at the acute angle for abscess, is it on axial CT only?</p>	<p>I always start with axial images but if I remain unsure, I then look at the coronal and sagittal planes as well</p>	<p>Rachel Benamore</p>
<p>If we identify asbestos-related benign pleural plaques on CT, do we need to do any imaging for follow up?</p>	<p>No - if there is a confident diagnosis of asbestos-related plaques no further imaging is advised based on this appearance alone. If the patient has worrying symptoms for malignancy or there are other worrying features on CT, following up/biopsy should be undertaken.</p>	<p>Louise Wing</p>
<p>is ct or us more sensitive for loculated effusion</p>	<p>I would suggest CT is more sensitive as the entire thorax is covered reliably each and every time.</p>	<p>Rachel Benamore</p>
<p>how to differentiate abscess versus infected cyst/bulla?</p>	<p>This can be very tricky! If there is prior imaging, you can match any fluid filled structure to pre-existing emphysema. In my experience, infected bullae tend to have less surrounding consolidation than a pulmonary abscess (unless the abscess is a septic embolus) but this is neither than sensitive nor specific</p>	<p>Rachel Benamore</p>
<p>Could we have the link to the study with rates of sensitivity of CT in picking up malignancy in effusion patients please?</p>	<p>You will be sent an email on Tuesday with links to all the lectures. I have included the references in my lecture</p>	<p>Rachel Benamore</p>

smallest nodule size that a PET can pick. is that 9mm	I think it's dependent on local protocols. We say 7-8mm in Oxford but if a patient has ILD it can be more difficult.	Louise Wing
smallest nodule size that a PET can pick. is that 9mm	Agree with Louise. With higher sensitivity scanners, i.e. total body PET, the size of nodule that can be characterised will get smaller	Manil subesinghe
for SUVmax is there a normal range?	My understanding of SUVmax is that it's vs background uptake. There is no normal range but subject to sampling error.	Louise Wing
is there a role of CTPET for assessing response to SABR?	live answered	Louise Wing
How can sarcoid be distinguished from lung malignancy on PET?	I think you are asking with regards to mediastinal and hilar lymphadenopathy? This can be tricky but symmetrical and uniform uptake within the nodes is more suggestive of sarcoid.	Louise Wing
How can sarcoid be distinguished from lung malignancy on PET?	Very difficult to distinguish sarcoid from lung cancer on PET-CT but there are some clues that can make the suggestion of one or another. Agree with Louise, symmetry of size and uptake is more suggestive of a benign process	Manil subesinghe
How can sarcoid be distinguished from lung malignancy on PET?	Any nodes that demonstrate higher intensity uptake than other nodes should be viewed with suspicion as should nodes that are unusually enlarged. SUV range can be the same as lung cancer	Manil subesinghe
Is the SUV in the same range?	It depends on how active the sarcoid is and the tumour subtype - but differential uptake between the nodes and the primary lesion would favour sarcoid	Louise Wing
Are MRIs a better modality than PETCT for liver lesions and suspected mets?	MRI can add additional diagnostic information in cases of liver lesions which do not demonstrate typical appearances of mets on pet-ct or do not behave as such in serial imaging	Louise Wing
Are MRIs a better modality than PETCT for liver lesions and suspected mets?	Agree with Louise. PET-CT can characterise benign vs malignant in the context of cancer with very good accuracy (no test is 100% perfect) but there are size limitations..e.g. 1cm or below so MRI would be beneficial here. MRI has added benefit of diagnosing what the lesion actually is.	Manil subesinghe
can hemangiomas increase in size?	yes they can but they tend to demonstrate quite specific features on MRI	Louise Wing
Are rheumatoid ans sarcoid nodules avid on PET?	Yes - both can be FDG avid on PET-CT	Louise Wing
many times we get reports: mediastinal lymph node FDG blood pool level-how do we interpret it in practice	This means no additional uptake to suggest there is malignancy	Louise Wing

many times we get reports: Agree. They're trying to reassure you that there is no significant mediastinal lymph node uptake in the mediastinal node  
FDG blood pool level-how do we interpret it in practice

Manil subesinghe

This may be a silly question - There is a stochastic (statistical) risk of 1/2500 malignancy - if the radiolabeled glucose this is due to radiation exposure in PET-CT. However the risk of emitting energy, is there any malignancy is due to a number of factors - e.g. some tissues are risk of any damage to high more radiosensitive than others  
update non pathological areas i.e. brain /kidney

Louise Wing

Are lung metastases less avid than primaries? Sometimes lung mets do appear less avid - this is often due to their smaller size. If there is a significant difference in avidity it raises the question of a second pathology or dedifferentiation

Louise Wing

Are lung metastases less avid than primaries? Old adage...daughters look like mothers, sons look like fathers...there should be some similarity in FDG avidity between primary and other sites of disease..differential uptake would be concerning for synchronous pathologies, although size can affect degree of uptake, as can tumoural heterogeneity

Manil subesinghe

what kind of avidity do BAC present with? it can be variable  
faint/moderate?

Louise Wing

When is low dose radiation CT scans not good enough? eg. for AECU CTPA requests should we always request low dose CT scans? Hi - sorry I'm not sure what AECU is.  
Low dose CT scans are fine for nodule follow ups.  
We tend to standard dose for CTPAs except in pregnant patients where a low dose protocol can be used to reduce risk of malignancy  
Low dose CT is often not sufficient for subtyping ILD

Louise Wing

is this a normal practice to measure the volume of the nodules. Volumetry is favoured but it's recognised that this isn't always available locally within workflows. The key is to pick one and stick with it rather than using it intermittently

Louise Wing

Is delayed phase contrast CT chest/abdo preferred for nodules, especially subpleural? Our centre tends to do CT thorax. What is the preferred CT to assess nodules? Thanks  
Thanks - non-contrast CT is sufficient in the first instance.  
Contrast enhancement does not feature in the nodule guidelines. If there is then a question about enhancement (e.g. could be a hamartoma and non-enhancement would increase confidence), single phase or dynamic contrast-enhanced CT then be performed and can add additional information.

Louise Wing

Is VDT always reported in CT reports? this is in the BTS guideline flowcharts. 3 months if volumes calculated and not small enough to discharge nor large enough to investigate at baseline

Rachel Benamore

There is increasing awareness that spirometry is suboptimal it diagnoses late disease, novel suggestion CT should be in diagnostic guidelines and is being considered in next GOLD  
good grief! That might be a lot of scans, although many might have undergone screening CT if in the right age group!

<https://pubmed.ncbi.nlm.nih.gov/40382791/>

Rachel Benamore

There are many patients with emphysema who do not meet spirometric criteria and in fact are more likely to have exacerbations, CanCold observational study among 1341 adults in CanCOLD, individuals newly classified as having COPD experienced more exacerbations (adjusted incidence rate ratio, 2.09; 95% CI, 1.25-3.51; P < .001).  
thank you for this information.

Rachel Benamore

Therefore using new diagnostic algorithm which includes CT would identify more patients and allow intervention in the frequent exacerbators, exacerbations in COPD linked exclusively to mortality and I believe it is worth intervening earlier, if meets new criteria including CT, this would promote earlier intervention  
Thank you for this information. So do you think that all emphysema, irrespective of severity, should be reported to the GP and participant in lung cancer screening scans? The updated screening guidelines suggested that mild disease should not be reported to the GP

Rachel Benamore

how to differentiate between emphysema and bullae  
the definition of a bulla is an air space >1cm. They are commonly seen in patients with emphysema. I only tend to make specific mention of them if they are causing mass effect. Otherwise I tend to report as emphysema with bullae

Rachel Benamore

how to diff between hetero and homno emphysema	heterogeneousve homogeneous emphysema refers to its distribution. Homogeneous is uniformly distributed. Heterogeneous is not, for example upper zone predominance etc...	Rachel Benamore
Can you please explain again about compressive and passive atelectasis	atelectasis just means collapse. The terms passive and compressive are used interchangeably in patients with pleural effusions. The fluid essentially squashes the air out of the lung.	Rachel Benamore
Lymphangtis carcinomatosis?	Lymphangitis is also a perilymphatic disease. Usually interlobular septal thickening is a dominant finding and is absent in this case	Rachel Benamore
is there mediastinal thickening medially? on the right side, just close to the heart Thanks	I don't think there is any mediastinal pleural thickening	Rachel Benamore
Can PACS bin be used to save record of interesting scans i.e. for learning/teaching?	absolutely! It's a freely available software platform at no cost. Google it!	Rachel Benamore
consolidation around bulla in emphysema vs PCP/fungal pneumonia vs Immunotherapy related pneumonitis. How do we diffrentiate between these?	immunotherapy induced pneumonitis rarely cavitates. consolidation around a bulla will have smooth internal walls whereas cavitation (e.g.fungal) often has an irregular inner wall-air interface. Pneumatocoeles in PJP can be difficult to differentiate from emphysema with surrounding GGO but look for centrilobular vessels in emphysema-they won't be present in the centre of a pneumatocoele	Rachel Benamore
Apologies for missing this on the slide - how many detected per 1000 screened?	from the UK trials, there was a 2.2% lung cancer detection rate	Rachel Benamore
Is it please possible to comment on the follow-up of incidental ILAs, for example found on LCS or imaging for other things. Do you alway refer to ILD colleagues? If stable/good lung function - how long to follow up for on HRCT. Sorry, not sure where to ask this question!	I suspect practice varies from hospital to hospital. Locally, we have an ILA pathway where patients are first seen by a chest physician to determine that the disease is truly asymptomatic, no CTD features etc.. then patients go into nurse led f/u with repeat CT intervals dependent upon whether disease appears fibrotic (CT at 1 year) vs non-fibrotic (CT at 2 years). For screen detected interstitial disease, reticulation >10% lung = ILD and all gets referred. We have also locally agreed to refer ILA which appears fibrotic. Non-fibrotic ILA it not included in outcome leters as patients will get recalled in 2 years within screening anyway	Rachel Benamore