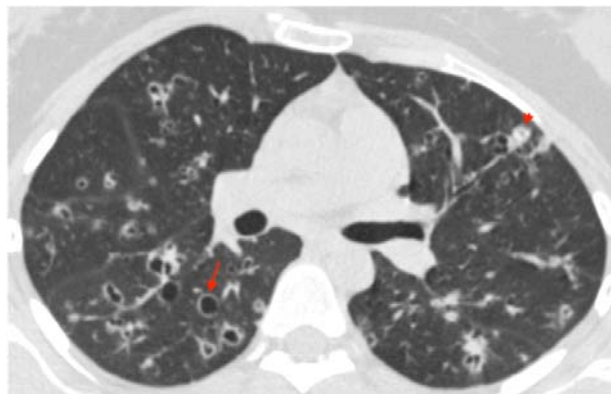


Image in Medicine

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Quiz 1

CT scan image of a 29-year-old tobacco smoker with acute onset dyspnea.



Questions :

- (1) What is the diagnosis?
- (2) What is Langerhans cell histiocytosis?
- (3) How to differentiate LCH, LAM and BHD?

Answers :

(1) Cysts (arrow) as well as nodules (arrowhead) are seen on this axial CT scan of the Lungs. The cysts are round to irregular bizzare shaped and some of the cysts are thick walled. These findings favour diagnosis of Langerhans Cell Histiocytosis (LCH).

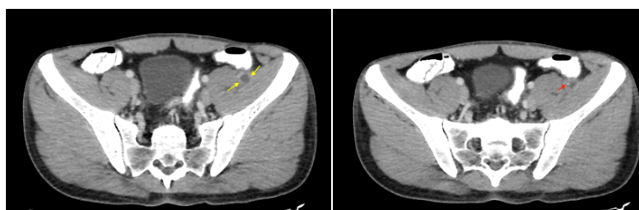
(2) Pulmonary LCH is a rare disorder, which typically occurs in smokers and is more common in men. HRCT findings vary according to the stage. The cystic phase is preceded by a nodular phase. The cysts are randomly distributed however, there is relative sparing of the Lung bases and costophrenic angles. The cysts are usually thin-walled (ranging from 1-20 mm), can progress to form thick, irregular walled, bizzare-shaped cysts .

(3)

	General features	Characteristic of cysts	Distribution of cysts
Langerhans Cell Histiocytosis (LCH)	- Male - Smoker	- Irregular walled bizzare shaped - Nodular and cystic srage	Randomly distributed, usually sparing Lung bases and costophrenic angles
Lymphangioloio-myomatosis (LAM)	- Female - Associated with Tuberos Sclerosis - if male - Serum VGEF levels very high - diagnostic	- Multiple - Uniform - Round - Smooth thin wall	Diffuse Symmetric
Birt Hogg Dube syndrome (BHD)	- Males > Females - Folliculin gene (FLCN) positive	- Round to elliptical - Thin wall - Vessel coursing along the edge or appear to pass through the cyst	Diffuse Paraseptal and paramediastinal

Quiz 2

A 25-year-old male presented with Vague Abdominal Discomfort.



Questions :

- (1) What is the diagnosis?
- (2) What are pathogenesis of this condition?
- (3) What are the radiological findings according to the stage?

Answers :

(1) Well defined peripherally enhancing cystic lesion (yellow arrow) with eccentric scolex (red arrow) is seen within the fibres of iliopsoas muscle – suggestive of intramuscular cysticercosis.

(2) Cysticercosis is a parasitic infection caused by

encysted larvae of *Taenia solium*, the pork tapeworm. Tapeworm infections are common in developing countries where there is poor access to sanitation facilities and close interaction between humans and animals. For *T. solium* man is the definite and pig is the intermediate host.

(3)

Stage	Imaging features	Clinical presentation	Pathology
Initial	Fluid filled cyst without peripheral enhancement	+/- symptomatic	Parasite is alive
Later	Peripheral enhancement with perilesional edema	Symptomatic	Leakage of fluid or parasite dead
Final	Elliptical calcified intramuscular lesion	Asymptomatic	Calcified / dead

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