Findings missed in chest radiography with MDCT correlation

15:45 Uhr
Referent(en): Horwarth N

**Kurzzusammenfassung:** Missing lesions on chest radiographs is frequent and the largest source of medico-legal issues. The main reasons for missing lesions on chest radiographs will be presented. The difference between perception and cognitive errors will be explained. Examples of missed nodules, masses, consolidations and infiltrative lung diseases will be shown and discussed in an interactive format. Useful tips to reduce our error rate will be shared and the importance of learning and applying key signs for optimizing the detection of abnormalities on both the frontal and the lateral views of the chest will be emphasized. An understanding of how side-by-side comparison of the chest radiograph and MDCT of missed lesions can help reduce the busy radiologist’s error rate will be provided.

**Lernziele:**
- To be aware of the actual risks of misdiagnosis when reading chest radiographs
- To learn the best tips and tricks for reducing your error rate
- To understand the limitations of chest radiographs compared with multidetector CT

Diagnosis and therapy of hydatid disease in the chest

16:15 Uhr
Referent(en): Akpinar M
**Kurzzusammenfassung:** Hydatid disease (HD) is caused by ingestion of larvae of the tapeworm Echinococcus. Humans are infected through contact with a definitive host or ingestion of contaminated vegetables or water. Following ingestion of E. granulosus eggs, they reach the liver, which is the most commonly involved organ in adults. The lungs are most common site for hydatid cysts in children and the second-most common site in adults.

Uncomplicated hydatid cysts are usually diagnosed incidentally at chest radiographs and appear as round or oval well-defined masses. On CT, they are well-circumscribed fluid-attenuation lesions with hyperdense walls. Unlike the hydatid cysts of the liver, calcification is very rare. It may be seen in pericardial, pleural, and mediastinal cysts.

Rupture of the hydatid cyst of the lung is a common complication seen in nearly half of the patients. The CT appearance of the ruptured hydatid cyst differs according to varying amounts of its contents and several signs have been defined to describe each one of them. Infection is the most common complication of the cyst rupture, which can be seen as increase in the cyst wall thickness with enhancement and the density of content. Pleural rupture causes hydrothorax or hydropneumothorax. Pulmonary hydatid cysts rarely rupture into the inferior vena cava and may cause recurrent pulmonary embolism. Thoracic wall invasion is occasionally seen.

CT is the imaging modality of choice. Ultrasonography may be used in cases of peripheral hydatid cysts and pediatric population. MRI is useful in the children due to lack of radiation.

The treatment of choice is surgery for patients with pulmonary HD. Lobectomy, wedge resection, pericystectomy, intact endocystectomy and capitonage are surgical options.

Benzimidazoles are indicated in disseminated disease, including secondary lung or pleural hydatidosis, poor surgical risk patients and in cases of intraoperative spillage of hydatid fluid. To reduce the risk of recurrence and the tension of the cysts for easier cyst removal, they can also be used before and after surgery.

**Lernziele:**
- Describe the pathophysiology of pulmonary HD.
- Recognize the radiologic findings of uncomplicated and ruptured HD.
- Discuss the treatment options of pulmonary HD.

**RöKo INT 203.3**

**Cases I would like to read again:** chest CT

16:45 Uhr  Referent(en): Diederich S