

RDG examination for inflammation of the lower respiratory tract

Template: Zkontrolováno

Anatomy

The lower respiratory tract includes:

- larynx ,
- trachea ,
- bronchi ,
- lungs .

Epiglottitis

A typical clinic + edematous epiglottis ("thumbprint sign") is displayed on a targeted lateral X-ray.



X-ray of the spine in lateral projection: normal image of the epiglottis, which is slender, aryepiglottic algea are unmagnified (<http://atlas.mudr.org/Case-images-Osseous-block-of-cervical-vertebra-801>)

Croup

Typical clinic in a typical patient + subglottic narrowing ("steeple sign") on a targeted X-ray image in anteroposterior projection.



X-ray of the AP spine: normal image of the larynx and beginning of the trachea (<http://atlas.mudr.org/Case-images-Processus-megatransversus-rudimentary-rib-1010>)

Bronchitis

In most cases, X-rays are not well known: rough bronchovascular drawing can also be caused by chronic changes.

Bronchiolitis

At HRCT a typical tree-in-bud - an image of a sprouting tree. Bronchiolitis is not the only one that can create this image.



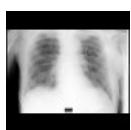
HRCT of the lungs: tree-in-bud in terminal bronchiolitis (<http://atlas.mudr.org/Case-images-Terminal-bronchiolitis-tree-in-bud-625>)



HRCT of the lungs: tree-in-bud in infectious bronchiolitis (<http://atlas.mudr.org/Case-images-Tree-in-bud-pattern-infectious-bronchiolitis-256>)

Peribronchitis

Amplification of peribronchia with small peribronchial infiltrates.



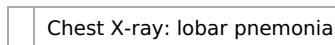
Chest X-ray: rough bronchovascular drawing bilaterally paracardially - reinforced bronchial wall, indicated peribronchial infiltrates (<http://atlas.mudr.org/Case-images-Chronic-bronchitis-acute-exacerbation-490>)

Pneumonia

Inflammatory conditioning of the lung parenchyma with airy bronchograms and preserved volume of the lung parenchyma (x airiness or compression).

According to the range , it can be specified as:

- Allar pneumonia: pulmonary wing.
- Lobar pneumonia: pulmonary lobe.
- Segmental pneumonia: pulmonary segment.



Chest X-ray: lobar pneumonia



Chest X-ray: lobar pneumonia (<http://atlas.mudr.org/Case-images-Lobar-pneumonia-142>)

Bronchopneumonia

Combination of peribronchial changes and inflammatory condensation of the lung parenchyma.



Chest X-ray: bronchopneumonia (<http://atlas.mudr.org/Case-images-Bronchopneumonia-bilateral-678>)

Pleurobronchopneumonia

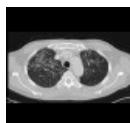
Combination of peribronchial changes and inflammatory condensation of the lung parenchyma.



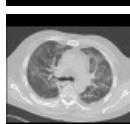
Chest X-ray: pleurobronchopneumonia (<http://atlas.mudr.org/Case-images-Pneumonia-pleural-effusion-650>)

Atypical pneumonia

Interstitial thickening, ground-glass in combination with infiltrates - an image that does not fall into the above categories, most often in immunocompromised patients .



HRCT of the lungs: pneumocystis pneumonia (<http://atlas.mudr.org/Case-images-Pneumocystis-pneumonia-827>)

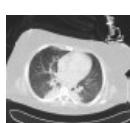


Pulmonary CT: atypical pneumonia (<http://atlas.mudr.org/Case-images-Atypical-pneumonia-730>)

Specific and granulomatous inflammations of the lung parenchyma

lung infections _ edit source]

- Aspergillus: only the colonization of the pre-formed cavity.
- Chronic necrotizing aspergillosis: cotton wool, limited deposit, thick hem.
- Aspergil bronchopulmonary aspergillosis:
 - dilatation of central bronchi,
 - high density mucus plugs are typical,
 - bronchial wall reinforcement.
- Bronchoinvasive aspergillosis: spreads through the bronchi, grows into the wall, tree-in-bud, thickens the bronchial wall, ground-glass, mucus plugs, the image of bronchopneumonia.
- Angioinvasive aspergillosis: a node in the lung parenchyma with a halo (typical), later cavitating, connecting to a blood vessel.



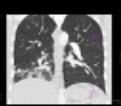
Pulmonary CT: angioinvasive aspergillosis (<http://atlas.mudr.org/Case-images-Aspergilosis-of-lung-cresent-sign-470>)



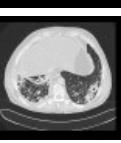
Chest X-ray: angioinvasive aspergillosis (<http://atlas.mudr.org/Case-images-Aspergillosis-of-the-lung-951>)

Pulmonary tuberculosis

There is often a non-specific finding in active tuberculosis - a picture of multiple condensations in the peribronchial distribution, cavities, tree-in-bud, miliary spread, enlarged lymph nodes in the hilum and mediastinum.



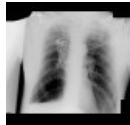
HRCT of the lungs: tuberculosis (<http://atlas.mudr.org/Case-images-Lung-tuberculosis-cavern-endobronchial-spread-tree-in-bud-624>)



HRCT of the lungs: tuberculosis (<http://atlas.mudr.org/Case-images-Lung-tuberculosis-caseous-pneumonia-HRCT-773>)

Postspecific changes in elderly patients are common:

- Peak pachypleuritis.
- Postspecific node - typically calcification.
- Fibrous stripes, hilarization.
- Calcification in nodes.
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Chest X-ray and HRCT of the lungs: postspecific changes in the lung parenchyma (<http://atlas.mudr.org/Case-images-Postspecific-changes-in-lung-1003>)

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Pneumonitis

Pneumonitis is a broad heterogeneous group of non-infectious inflammations of the lung parenchyma.

Important

- In diff. Consideration is a very important clinical condition of a patient well filled out request.
- A tumor can also be hidden behind pneumonia.

Links

Related articles

- ■ Diagnostic imaging methods in chest examination
- Pneumonia
 - Infant pneumonia • Pneumonia in older children
 - Bacterial pneumonia • Atypical pneumonia
 - Absent pneumonia

External links

- ■ pictures at atlas.mudr.org