Міністерство охорони здоров'я України

Харківський національний медичний університет

Кафедра Внутрішньої медицини №3

Факультет VI по підготовці іноземних студентів

ЗАТВЕРДЖЕНО
на засіданні кафедри внутрішньої медицини №3

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Зав. кафедри _____д.мед.н., професор Л.В. Журавльова

МЕТОДИЧНІ ВКАЗІВКИ

для самостійної роботи студентів англійською мовою

з дисципліни «Внутрішня медицина (в тому числі з ендокринологією)

студенти 4 курсу I, II, III медичних факультетів, V та VI факультетів по підготовці іноземних студентів

Плеврити

Харків 2016

Mastering the skills of data interpretation of chest radiographs, interpretation of pleural fluid analysis (microscopic, bacteriological and bacterioscopic research).

From radiological methods of investigation respiratory applied X chest X-rays, tomography, X-ray and Bronchography.

The most common method is X-ray of the lungs, which allows to determine:

1) transparency of the lung fields,

2) fire sealing (infiltration, fibrosis, tumors)

3) cavities in the lung tissue,

4) foreign body in the trachea and bronchi,

5) the presence of fluid or air in the pleural cavity,

6) severe pleural adhesions and mooring.

Radiography.

It is used to diagnose and registration on x-ray film X-rays detected in lesions in the respiratory organs. Some changes (unexpressed focal sealing, broncho-vascular pattern, etc.) determined the X-ray better than X-skopi.

Renthenokimohrafiya.

With this technique to a cassette of film X-rays on the way that the X-ray tube to fall from everywhere patient's body, a special set of lead grille with horizontal slit. During the photo grid moves a short distance of circuit body that investigated, as well as the very body during this time performs a movement parallel to the hole lattice, then the film circuit formed body is not flat, but as the dentate line.

For amplitude teeth and their form may determine the strength of abbreviations and assess their nature (eg, heart).Tomography.

Allows layered x-ray of the lungs. It is used for a more thorough diagnosis of tumors, as well as small infiltrates voids and cavities. When imaging through movement while shooting a defined speed X-ray tube on the tape appears clear image only those structures that are located on a single depth, defined earlier.

Shadows of organs and structures located on a smaller or greater depths, formed greased and not imposed on the main image. Latest method is computer tomography.

Bronchography.

It is used to study the bronchi. Patient after pre-anesthesia airway passage in the bronchi injected kontrast (yodolipol), which delays the X-rays. Then remove X-ray of the lungs, which formed a clear image of the bronchial tree. This method can detect bronchoectasis, pulmonary abscesses and cavities, bronchoconstriction tumor.

Radiographic data in exudative pleurisy

Determined homogeneous darkening that meets stupidity limits determined on percussion of the chest. With a small amount of liquid is collected in an external sinus. Very large exudates cover all light to the top, accompanied by a significant shift in mediastinum healthy side down and removal of the diaphragm.

- Encysted pleurisy wall surface gives a picture of the wall eclipse, with medial border is sharply delineated.

- If puurisy is located between lobs the eclipse is located along the lobs as a spindle or triangle.

- Diaphragmatic pleurisy characterized by sharp restriction of movement of the diaphragm or the complete lack of it. Veorhniy convex contour exudate up and repeats the shape of the diaphragm.

Research pleural fluid.

In the cavity of a healthy person has a small amount of fluid, which is close in composition to the lymph, which facilitates slip of pleura during respiration. The volume of pleural effusion may increase as excited blood and lymph circulation in the lungs - inflammatory exudate (transudat) and inflammatory changes of the pleura (the fluid). Fluid may be caused by an infection of pleural primary clinical symptoms or concomitant with common infections and in certain diseases of the lungs and mediastinum (rheumatism, heart attack, cancer and tuberculosis, Hodgkin's disease, etc.).

Research pleural liquid aims:

1) to determine its nature (transudat, fluid, pus, blood, fluid hylozna);

2) study the cellular composition of the liquid, which makes it possible to decide on the nature of the pathological process, and sometimes (when on finding tumor cells) - and about the diagnosis;

3) in the case of an infectious nature identify pathogen destruction and set its sensitivity to antibiotics.

Analysis of pleural liquid consists of:

1) macroscopic,

2) physical and chemical,

3) microscopic,

4) microbiological

5) biochemical.

The appearance of pleural fluid depends on the cellular and chemical composition:

- Transudat and serous exudate - transparent are slightly

- Clouding of the fluid is the presence of white blood cells (sero-purulent and purulent exudate), erythrocytes (hemorrhagic fluid) drops of fat.

-The nature of the cells is determined by microscopy. Sslightly determine the nature of the breakdown of the ether, the addition of which turbidity disappears.

- Color transudata pale yellow,

- Serozny exudate - from pale to golden yellow, with jaundice - to the rich yellow,

- When mixed with blood - red viddinkom or brownish gray.

- Hemorrhagic effusion, depending on the amount of blood and the period of stay in the pleura may have different colors from pink to dark red and brown.

- If hemolysis effusion is lacquer look.

- Slightly fluid resembling diluted milk.

In the study of chemical-physical determine:

- The total density (the total density of less than 1,015 transudate, often within 1,006-1,012, the total density of exudate - more than 1,015, preferably 1,018-1,022).

- Protein in transudate is fewer than the fluid, but not more than 3% (usually 0.5-2.5%) in fluid - 3-8%.

- Composition almost protein fractions exudate such as serum; in transudati - dominated albumin, fibrinogen it almost completely absence, so it coagulates. In fluid fibrinogen less than levels (0.05-0.1%), but enough for spontaneous collapse of most of exudates. The content of total protein in transudati often is 4-5%; in such cases differentiation it with exudate apply additional tests:

o - Rivalta test - with the addition of acetic acid

o - test Lukerini - with the addition of hydrogen peroxide

Both samples to determine the presence of fluid serozomutsin - mukopolisaharyds complex that is missing in transudate.

In the microbiological study transudate is usually sterile, but may be infected during many puncturs. Fluid can be sterylny (eg, rheumatoid pneumonia, lung cancer). Serous fluid in tuberculous mycobacteria determine the etiology Bacterioscopic fails,, but in the crops of vaccination punctate or guinea pigs can sometimes get positive results.

In pleurisy, which are dictated by purelent flora, it is determined by Bacterioscopic Coating method program. If not, you need to carry out sowing.

For the treatment of patients revealed bacteria tested for sensitivity to antibiotics.

Control questions:

1. What are the most important criteria general research of sputum?

2. What main krierias of microbiological studies of sputum?

3. What is the character of sputum in various respiratory diseases?

4. What substances can be found in sputumi?

5. What sdetected by microscopic examination of harkotinni?

6. What are the most important criteria for general research pleural fluid?

7. What are the most important criteria for microbiological examination of pleural fluid?

8. Laboratory signs of exudate.

9. Laboratory signs transudatu.

RECOMMENDED BOOKS:

1.Clinical Pulmonology - 2016 (The Clinical Medicine Series Book 19).-343h.

2 .Pulmonary Disorders [Sect. 5, Merck manual] 2010.-123p.

3.Pulmonary Pathophysiology : The Essentials by (author) John B. West 2012 .-20

4.Davidson's Principles and Practice of Medicine 22nd Edition .-Walker, Brian R., FRSE.-2014.-1312p.

Website of the departament: http://www. vnmed3.kharkiv.ua/,

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