ification, resulted in the successful management of all the severe complications, stabilization of the patient's condition, restoration of the functions of organs and systems, and the recovery of the patient.

REFERENCES

1. Andrianova M.Ju. Paljulina M.V. Kukaeva E.A. Perekisnoe okislenie lipidov i soderzhanie srednih molekul pri operacijah na serdce s iskusstvennym krovoobrashheniem [Peroxide oxidation of lipids and content of medium molecules in cardiac surgery with artificial circulation] Anest. i reanimatol. [Anest. and reanimat.] Moscow, 2001, vyp. 2, p. 33–35.
2. Bokerija L.A. Goluhova E.Z. Sigaev I.Ju. Keren M.A. Sovremennye podhody k hirurgicheskomu lecheniju IBS u bol'nyh s saharnym diabetom [Modern approaches to the surgical treatment of cardiac ischemia in patients with diabetes mellitus] Vestnik RAMN [Bulletin of the Russian Academy of Medical Sciences] Moscow, 2012, №1, p. 20 – 26.
3. Gladysheva V.G. Vlijanie aktivirovannogo faktora VII na gemostaticheskij potencial pri massivnyh refrakternyh krovotechenijah u kardiohirurgicheskih bol'nyh: avtoreferat kandidata medicinskih nauk: 14.00.29 [Influence of activated factor VII on the haemostatic potential with massive refractory bleeding of cardiosurgical patients: the author's abstract of the candidate of medical sciences: 14.00.29] Gematol. nauch. centr RAMN [Hematol. sci. center of RAMS]. Moscow, 2006, p. 21.
4. Iskanderov B.G. Sisina O.N. Ostroe povrezhdenie pochek i ego prognosticheskoe znachenie u pacientov s saharnym diabetom 2 tipa, podvergshihsja aortokoronarnomu shuntirovaniju [Acute kidney injury and its prediction of significance in patients with type 2 diabetes mellitus who underwent aortocoronary bypass surgery]. Nefrologija [Nephrology] Moscow, 2015, vol. 19, №4, p. 67-73.
5. Miroljubova O.A. Ostroe povrezhdenie pochek posle aortokoronarnogo shuntirovanija na rabotajushhem serdce: prognozirovanie ishodov [Acute kidney injury after aortocoronary bypass surgery on the off-pump method: predicting outcomes], Nefrologija i dializ [Nephrology and dialysis] Moscow, 2014, vol. 16, № 3, p. 350-358.
6. Cardiac troponin I: Its contribution to the diagnosis of perioperative myocardial infarction and various complications of cardiac surgery / M.O. Benoit, M. Paris, J. Silleran [et al.] //Crit Care Med. - 2001. - Vol. 29. - pp. 1880-1886.
7. Mediastinitis after more than 10,000 cardiac surgical procedures / A.M. Eklund, O. Lyytikainen, P. Klemets [et al.] //Ann Thorac Surg.-2006. - 82(5):1784-9.
8. Perioperative activation of hemostasis in vascular surgery patients / C.M. Samama, D. Thiry, I. Elalamy // Anesthesiology. – 2001. – Jan 94(1). – pp. 74–8.

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CLINICAL CASE OF BRONCHIECTASIS IN THE TEENAGER OF 16 YEARS

ABSTRACT

This article is devoted to the observation during 3 years (2014-2017) of the clinical case of bronchiectasis in a teenager of 16 years. His complaints were shortness of breath during physical exertion, a wet cough with purulent sputum. From an early age he often (about 5 times a year) had bronchitis with an obstructive syndrome. He was hospitalized in the pulmonology department with the diagnosis: community-acquired pneumonia, middle-lobe, moderate severity. According to the results of computed tomography of chest organs, a conclusion was made: bronchiectasis of the middle lobe of the right lung.

Keywords: bronchiectasis, fibrosis, teenager, pneumonia, bronchial asthma.

Bronchiectasis (BE) occurs in about 0.5-1.5% of the population, developing predominantly in childhood and young age (from 5 to 25 yrs). The disease occurs in the form of recurrent bronchopulmonary infections and is accompanied by a constant cough. The lesion of the bronchi with bronchiectasis may be limited to one segment or a lobe of the lung or be widespread (1-2).

Acquired bronchiectasis occurs as a result of frequent respiratory infections, the migrated in childhood - pneumonia, chronic deforming bronchitis, tuberculosis or lung abscess. Sometimes bronchiectasis develops as a result of ingress of foreign bodies in the bronchial lumen.

Chronic inflammation of the bronchial tree causes changes in mucosal and muscular layers of bronchi and in the peribronchial tissue. Becoming malleable, affected walls of the bronchial tubes to dilate. Pneumosclerosis processes in the lung tissue after suffering bronchitis, pneumonia, tuberculosis or lung abscess leads to scarring of the pulmonary parenchyma and dilation, distortion of the bronchial walls. Destructive processes also affect the nerve endings, arterioles and capillaries that feed the bronchi.

Fusiform and cylindrical bronchiectasis affect large and medium-sized bronchi,

saccular –smaller ones. Uninfected bronchiectasis are few and small in size, can long time does not manifest itself clinically. With the accession of infection and development of inflammation bronchiectasis filled with purulent sputum, supporting chronic inflammation in the bronchi modified. The maintenance of a purulent inflammation in the bronchi contributes to bronchial obstruction, the obstruction of self-purification of the bronchial tree, reducing the protective mechanisms of the bronchopulmonary system, chronic suppurative processes in the nasopharynx (1-2). Timely diagnosis and clinical monitoring, sanitation foci of infection achieve long-term remission of chronic disease in children.

The **aim** of the study: to show the clinical course of bronchiectasis in a 16 years child.

Materials and methods of the research

The outpatient (the clinic of the monitoring) and in-patient (pulmonary department of Republican Hospital №1 - National Medical Center) cards of the patient.

The results of observation: from birth the child is concerned about complaints of shortness of breath on exertion, cough with purulent sputum.

From the anamnesis of disease:

From an early age he had episodes of bronchitis with obstructive syndrome (about 5 times a year). The child has burdened heredity: his grandmother along his father's side has diabetes mellitus, his grandmother along mother's side has bronchial asthma. He lives in a damp house without bathroom. In June 2014, he had bilateral pneumonia. In November 2014 - acute bronchitis. He was treated stationary at the place of residence in the hospital. Then the child was urgently hospitalized in the pulmonology department with a diagnosis of community-acquired pneumonia, middle-lobe, moderate severity. He was treated with Cefotaxime 1 gram 3 times a day, and Bromhexine. The results of computed tomography of the chest conclusion: bronchiectasis of the middle lobe of the right lung. Until 2016 he was hospitalized every year in the pulmonology department of the RH № 1- NCM, radiographs of chest organs showed infiltrative changes in the lungs.

In 2016 he was hospitalized and examined at the National Children's Health Center in Moscow with the diagnosis: Q 33.8 Other congenital malformations of the lung. Congenital malformations of the bronchi: bronchiectasis of the middle lobe of the right lung. Chronic bronchitis.

In 2017, the child was hospitalized in the pulmonology department of the RH № 1- NCM, an allergological examination was carried out, as a result, sensitization to allergens of pillow feather, house mites, cat wool, birch, timothy, *cock's foot* pollen and tangarines was revealed. A study of the level of immunoglobulins of blood was performed, the following results were revealed: immunoglobulin A-1.55 mg/ml, immunoglobulin M-1.8 mg/ ml, immunoglobulin G -24.0 mg / ml, immunoglobulin E total -14.7 MU/ml.

The nasal secretion was studied and the following data (per 100 cells) were obtained: neutrophils - 81hpf; lymphocytes - 8 hpf, eosinophils - 11 hpf. Bacteriological culture of sputum was carried out, as a result of which Staphylococcus aureus susceptible to gentamicin, clindamycin, co-trimoxazole, oxacillin, ciprofloxocin and erythromycin was cultivated. X-ray examination was carried out, as a result of which the conclusion was made: deforming bronchitis. Pneumosclerosis of ligulate segments on the left. Spirometry was performed, a conclusion was made - there are no violations in the spirogram. The test with salbutamol is weakly positive.

A computed tomography of the thoracic organs was performed. As a result of the study, subpleurally located foci of the type of frosted glass, prone to fusion in the right lung in S1, have been identified. There is some decrease in the volume of the middle lobe of the right lung. In the segments of the basal pyramid of the lower lobes of the lungs, mainly in the right side in the middle lobe and in the ligament segments on the left, the parenchyma segment compaction by the type of fibrosis is preserved. Bronchi on both sides are with dense walls. Intramammary lymph nodes are not enlarged. There is no effusion in the pleural cavity. Conclusion: During the period 2016-2017, foci appeared in S1 in the right lung.

Bronchial lavage was cultivated. Streptococc pneumonia, resistant to clindamycin, oxacillin, erythromycin, sensitive to levofloxacin, tetracycline was isolated.

As a result of the study, the following diagnoses were made:

Diagnosis clinical J47.0 Bronchoectatic disease, cylindrical bronchiectasis in the S1 lobe of the right lung, moderate severity.

Complications: J96.0 Respiratory failure of the I degree.

Concomitant diagnoses: J 45.0 Bronchial asthma. Atopic form. Easy course. Uncontrolled. The period of remission. J30.4 Allergic rhinitis. Persistent current. The average severity. Period of relapse.

The following measures are recommended: observation of the district pediatrician at the place of residence, dispensary observation at the pulmonologist and allergist, hospitalization in the pulmonology department of the RH № 1- NCM annually for the purpose of dynamic observation and specialized examination, hypoallergenic life (to exclude contact with feather pillows, pets and plants) hypoallergenic nutrition (exclude stone fruits, honey, carrots, cereal products, tangerines), elliptic revert one inhalation 22 mcg + 92 mcg 1 time / day for 3 months, after that pulmonologist and allergist examination, expectorant drugs, peakflowmetry 4 times a day, situational therapy of attacks of bronchial asthma.

Conclusion

Management of patients with bronchiectasis is a difficult task for the district pediatrician, pulmonologist and other specialists, since frequent monitoring of the course of the disease is necessary, which will allow long-term remissions of a chronic disease in children.

REFERENCES

1. Bolezni organov dyhaniya u detej [Diseases of the respiratory system in children] Pod red. S. V. Rachinskogo, V. K. Tatochenko [ed. by S.V. Rachinsky, V.K. Tatochenko]. Moscow, Medicina, 2007, 496p.
2. Paleev N.R. Bolezni organov dyhaniya. Rukovodstvo dlya vrachej [Diseases of the respiratory system. The manual for doctors] pod redak. N.R.Paleeva [edit. N. R. Paleev]. Moscow, Medicina, 2000, V. 3, 4.

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