American Journal of Bioscience and Clinical Integrity
https://biojournals.us/index.php/AJBCI
ISSN: XXXX-XXXX

Difficulties in Diagnosing Dust Bronchitis in the Practice of a Resident

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Received: 2024 29, Jan
Accepted: 2024 24, Feb
Published: 2024 18, March

Annotation: Scientific and technological progress, the introduction of mechanization and automation in production processes, modernization of equipment, rationalization of sanitary devices have caused the disappearance or sharp change of occupational harmful factors in most enterprises of our country. The article considers the importance of timely diagnosis, differential diagnosis, therapeutic and preventive factors in the diagnosis of dust bronchitis developed under the influence of dust.

Keywords: industrial dust, X-ray diagnostics, respiratory organs, pathogenesis, diagnostics.

INTRODUCTION

Scientific and technological progress, the introduction of mechanization and automation in production processes, modernization of equipment, rationalization of sanitary devices have caused the disappearance or sharp change of occupational

harmful factors in most enterprises of our country. According to the current laws adopted in our republic, the permissible levels of exposure to occupational harmful factors have been determined, which prevents the development of acute and chronic occupational diseases. But it is not always possible to eliminate occupational harmful factors, since science and technology cannot fully solve radical solutions in this area.

Occupational diseases are divided into 5 groups according to etiology, and one group of them consists of diseases that have developed due to exposure to industrial aerosols, which include pneumoconiosis, silicosis, siderosilicosis, anthracosilicosis, asbestos, carboconiosis, dust bronchitis, etc.

Industrial dust is particles suspended in the air that are formed during the production process. Dust is the physical state of a solid, so it is included in physical factors. Dust is an aerosol and consists of an aerodynamic system in which the dispersion medium is air and the dispersed phase is dust particles. Dust has been one of the harmful factors affecting the human body since ancient times, when soil cultivation and mining began. The dust factor is widespread in production and has an adverse effect on a large number of workers. Therefore, the prevention of its adverse effects is one of the important tasks of the science of occupational diseases. Dust control also has technological (wear of technological equipment, reduction in the quality of products) and environmental (many types of dust are valuable raw materials or products) significance. Economic losses are especially high in such areas as grain processing, cement production, melting of non-ferrous metals.

The dust factor is widespread. Dust is formed as a result of technological processes in almost all spheres of activity of manufacturing enterprises, transport and agricultural production. Particularly high concentrations of dust are formed in the mining and coal industry. Dust is formed during mining (drilling, blasting, enrichment), loading, long-distance transportation, unloading, separation and enrichment. At textile enterprises, dust is mainly released at the initial stages of preparation and processing of raw materials (carding, cleaning, sorting, spinning). During agricultural work (plowing, harvesting, application of mineral fertilizers, etc.), dust of various compositions is formed. Dust is a leading factor in grain processing plants (mills), cotton (cotton gins) and hemp. Dust is also formed at chemical plants, woodworking and furniture industry enterprises, in the production of building materials (cement, brick, glass, etc.), construction works. It is worth noting that the level of dustiness during outdoor work varies depending on the time of year, weather conditions, soil moisture.

More and more attention is paid to the health of workers under the influence of harmful occupational factors, intensity, quality of work, environmental pollution, occupational diseases. In recent years, an analysis of occupational morbidity in the Republic of Uzbekistan has shown that they are more often noted among workers in the

economy and agriculture. These are chronic bronchitis, acute and chronic poisoning with pesticides, toxic hepatitis, silicosis, dust bronchitis, cochlear neuritis, vibration disease, brucellosis, allergic dermatitis, etc. There are harmful and negative factors: gases, dust in the form of steam, allergens, toxic substances that affect the respiratory tract. The dry climate of Uzbekistan often affects the respiratory tract.

There are harmful and negative factors: gases, dust in the form of steam, allergens, toxic substances that affect the respiratory tract. The dry climate of Uzbekistan often causes irritation of the respiratory tract.

In the Samarkand region of the Republic of Uzbekistan, ideas about the anthropogenic impact of tobacco dust are successfully expanding, a conceptual model for reducing respiratory diseases among tobacco growers has been developed. Prolonged inhalation of small particles of the respiratory fraction (sizes up to 5 microns) causes them to settle and accumulate in the lung tissue. In this case, there is a possibility of developing dust bronchitis – a chronic disease. These include general diseases related to non-specific occupational diseases that have a certain harmful factor and occur in industrial conditions, that is, chronic dust bronchitis, bronchial asthma, tuberculosis, emphysema of the lungs, etc.

Dust bronchitis is a diffuse inflammation of the mucous membrane of the trachea and bronchi observed in workers exposed to high doses of industrial aerosols. The incidence of chronic bronchitis among workers of dusty enterprises varies greatly and depends on the age of the worker, work activity and the amount of dust. The absence of a single diagnostic method is also important.

Etiology. Dust bronchitis is a polyethological disease, as is chronic bronchitis in general pulmonology. This applies not only to the influence of non-professional factors (gender, age, smoking, infection, upper respiratory tract diseases, etc.), but also to the effects of industrial aerosols, which are the main cause of the disease.

Dust bronchitis develops in workers due to prolonged (10 years or more) exposure to industrial aerosols, the content of which in the air of workplaces is several times higher than permissible norms.

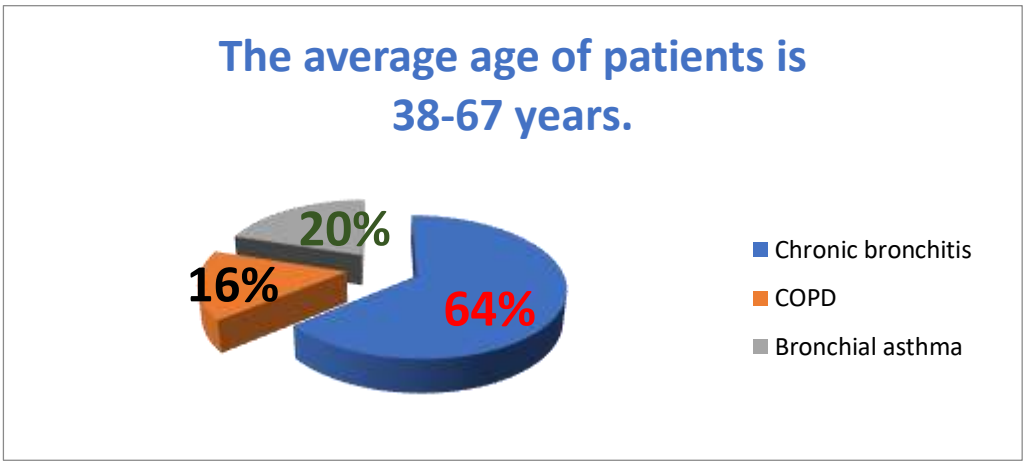
The purpose of the study:

Diagnostics of occupational diseases of the respiratory system, in the diagnosis of dust bronchitis to identify the possibility of occupational etiology, study the significance of a complete professional history collected from patients undergoing inpatient treatment.

Materials and methods of research.

In the pulmonological department of the city hospital No. 172 patients with diseases of the upper respiratory tract were examined in Samarkand. All patients were examined according to generally accepted standards: a general blood test, a general urine test, an X-ray examination of the chest organs, a study of the function of external

respiration, a study of sputum. Complaints of patients with shortness of breath, dry cough in a dusty environment and minor physical exertion, which makes it possible to suspect the professional etiology of the disease. In addition, special attention was paid to the professional history of these patients. The average age of patients is 38-67 years. 64% of patients were diagnosed with chronic bronchitis, 16% with COPD, and 20% with bronchial asthma. When collecting anamnesis, a list of questions about the patient's occupation, harmful professional factors was compiled.



Results

In 20% of patients with a professional history, a connection has been established with various dust in working conditions (a certificate from a local sanitary inspection station is required for confirmation). Our indicators are much higher than those given in other sources. These patients are not treated as patients with occupational diseases. Therefore, the treatment was carried out from the point of view of clinical diagnosis.

Conclusion

If professional dust bronchitis is suspected, the clinician should think about the nature and localization of the pathological process, the causes of the disease, and the possible involvement of working conditions in it. It is necessary to assess the physical condition of the patient, the ability to continue working, the presence of respiratory failure.

In the differential diagnosis of chronic bronchitis and occupational dust bronchitis in patients who are hospitalized for treatment, the professional history (for confirmation of which a certificate from the local sanitary and epidemiological station is required) is not fully collected and causes difficulties for the doctor, and this, in turn, causes problems in the selection of etiopathogenetic treatment.

REFERENCE

Мамурова Н.Н., Носирова Д.Э. «Тяжесть течение внебольничной пневмонии в зависимости от сопуствующей патологии». «Тенденции и перспективы развития науки и образования в условиях глобализации». Выпуск 22. Г.Переяслав-Хмельницкий. 28-февраль, 2017 год. 490-492 стр

Рашевская А.М., МолоковК.П., Орлова А.А. Бериллиоз. Клиника, диагностика, лечение, экспертиза трудоспособности. М.: Медицина, 1965; с. 60.

Полякова И.Н. Пневмокониозы. В кн.: Респираторная медицина: руководство. Под ред. Г.Чучалина. Т. 2. М.: ГЭОТАР-Медиа, 2007; с. 335–50.

Справочник профпатолога. Под ред. Л.Н.Грацианской и В.Е.Ковшило. М.: Медицина, 1977; с. 255–87

Сенкевич Н.А. Клинические формы силикоза и силикотуберкулеза. Под ред. А.М. Рашевской. М.: Медицина, 1974; с. 200.

Xoljigitova M.B. Mamurova N.N. Maxmatmuradova N.N. Zakiryayeva P.O. Nosirova D.E. «O`pka kasalliklari bilan bemorlarni olib borish» O'quv qo'llanma. Toshkent 2021 yil 70-96 betlar.

Consilium Medicum №11 2016 - Пневмокониоз в практике лечащего врача Автор: О.С.Васильева, Н.Ю.Кравченко Номера страниц в выпуске: 39-40

International Labour Organization (ILO), Guidelines for the use of ILO International Classification of Radiographs of Pneumoconiosis. Geneva, Switzerland: ILO, 1980.

Мамурова Н.Н., Носирова Д.Э. "Вопросы оказание медицинской помощи при пневмонии с коморбидными состояниями на уровне стационарного лечения". Халкаро илмий амалий журнал «Биология ва тиббиёт муаммолари» №1.1 (108) Самарканд 2019 г.30.11-1.12.2019, 181 бет. Халкаро илмий амалий журнал «Биология ва тиббиёт муаммолари» №1.1 (108) Самарканд 2019 г. 30.11-1.12.2019, Стр 181