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COMORBIDITY IN THERAPEUTIC PRACTICE. MESSAGE 2: EPIDEMIOLOGY, ASPECTS OF PREVENTION AND FEATURES OF MODERN CLINICAL MANIFESTATIONS

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Comorbidity as the coexistence of two and/or more syndromes or diseases that are pathogenetically interrelated or coincide in time in one patient, regardless of the activity of each of them, is widely represented among patients admitted to therapeutic hospitals. At the stage of primary health care, patients with multiple diseases at the same time are the rule rather than the exception. According to M.. Fortin, based on the analysis of 980 medical records taken from the daily practice of a family doctor, the prevalence of comorbidity ranges from 69% in young patients(18-44years) to 93% in middle-aged people (45-64 years). andup to 98% – in patients of the older age group (under 65 years of age). At the same time, the number of chronic diseases varies from 2.8 in young patients to 6.4 in old people (M.. Fortin, 2005) [1].In this paper, the author points out that the basic research of medical documentation aimed at studying the prevalence of comorbidity and identifying its structure was carried out before the 90s of the last century. Attention is drawn to the sources of information obtained by researchers and scientists who dealt with the problem of comorbidity. They were medical records (Hoffman C., et.al. 1996; Fuchs Z., et.al. 1998; Daveluy C., et.al2001.) [2,3,4], outpatient patient records and other medical documentation available to family doctors (van den Akker M., et.al. 1998) [5], in insurance companies (Wolf J..L.. et.al. 2002) [6] and even in the archives of boarding schools for the elderly (Cuijpers P., et,al. 1999) [7]. These methods of obtaining medical information were mostly based on the clinical experience and qualifications of clinicians who made clinically, instrumentally and laboratory-confirmed diagnoses of patients. That is why, despite their absolute competence, they were very subjective. It is surprising that none of the comorbidity studies performed analyzed the results of path anatomical autopsies of deceased patients. It is very important. "The position of doctors who were treated to open it," Professor Mudrov once said. Autopsy allows us to reliably determine the structure of comorbidity and the immediate cause of death of each patient, regardless of their age, gender, and gender characteristics. Statistical data on comorbid pathology based on these sections are largely devoid of subjectivity.

Prevention and treatment of chronic diseases is designated by the World Health Organization as a priority project of the second decade of the XXI century, aimed at improving the quality of life of the world's population (Starfield B., et.al. 2003; van Well C., et.al. 2006; Gill T., et.al. 1994; DCCT Research Group 1998; Michelson H., et.al. 2000;) [8,9,10,11,12]. This is due to the widespread tendency to conduct large-scale epidemiological studies in various fields of medicine, performed using serious statistical calculations.

An analysis of a ten-year Australian study of patients with six common chronic diseases found that about half of elderly patients with arthritis have hypertension, 20% have cardiovascular disease,and 14% have type 2 diabetes. More than 60% of patients with bronchial asthma reported concomitant arthritis, 20% – cardiovascular diseases, and 16%-type 2 diabetes (Caughey G..E.. et.al. 2008) [13].In elderly patients with chronic renal failure, the incidence of coronary heart disease (CHD) is 22% higher, and new coronary events are 3.4 times higher than in patients without impaired renal function (Aronow W..S.2000) [14]. With the development of end-stage renal failure requiring replacement therapy, the incidence of chronic forms of CHD is 24.8%, and myocardial infarction is 8.7%. The number of comorbid diseases increases significantly with age. Comorbidity increases from 10% under the age of 19 to 80% in people 80 years and older (van den Akker., et.al. 1998) [15].

In a Canadian study of 483 obese patients, the prevalence of obesity-related comorbidities was found to be higher among women than men. The researchers found that about75% of obese patients had comorbidities, which in most cases were dyslipidemia, hypertension, and type 2 diabetes. It is noteworthy that among young obese patients (from 18 to 29 years), 22% of men and 43% of women had more than two chronic diseases(Bruce S..G., et.al. 2011) [16].

According to our data, based on the materials of more than three thousand pathoanatomical sections (n=3239) of patients with somatic pathology admitted to a multidisciplinary hospital for decompensation of a chronic disease (mean age 67.8±11.6 years), the frequency of comorbidity is 94.2% (Vertkin A. L.,, et al. 2008) [17]. Most often in the work of a doctor there are combinations of two or three nosologies, but in isolated cases (up to 2.7%), up to 6-8 diseases are combined simultaneously in one patient (Vertkin A. L.,, et al., 2009) [18].

A fourteen-year study of 883 patients with idiopathic thrombocytopenic purpura, conducted in the United Kingdom, showed that this disease is associated with a wide range of somatic pathology. In the structure of comorbidity of these patients, malignancies, diseases of the musculoskeletal system, skin and genitourinary system, as well as hemorrhagic complications and other autoimmune diseases are most

common, the risk of which exceeds the limit of 5% within five years from the onset of the underlying disease (Feudjo-Tepie M..A., et.al. 2009)[19].

The study, conducted in the United States, included 196 patients with laryngeal cancer. In this study, it was shown that the survival rate of patients with different stages of laryngeal cancer varies depending on the presence or absence of comorbidity. At the first stage of cancer, the survival rate is 17% in the presence of comorbidity and 83% in the absence of it, at the second stage - 14% and 76%, at the third stage-28% and 66%, and at the fourth stage-0% and 50%, respectively. Overall, the survival rate of comorbid patients with laryngeal cancer is 59% lower than that of patients without comorbidity (Deyo R..A.. et.al. 1992) [20].

As can be seen from recent studies, in addition to internists and general practitioners, the problem of comorbidity is very often faced by narrow specialists. Unfortunately, they very rarely pay attention to the coexistence of a whole range of diseases in one patient and are mainly engaged in the treatment of a specialized disease. In the current practice, urologists, gynecologists, otorhinolaryngologists, ophthalmologists, surgeons and other specialists often make a diagnosis only of "their" disease, leaving the search for concomitant pathology "at the mercy" of other specialists. The unspoken rule of any specialized department has become the consulting work of a therapist who has taken on the syndromic analysis of the patient, as well as the formation of a diagnostic and therapeutic concept that takes into account the potential risks of the patient and his long-term prognosis.

Thus, the influence of comorbid pathology on the clinical manifestations, diagnosis, prognosis and treatment of many diseases is multifaceted and individual. The interaction of diseases, age and drug pathomorphism significantly changes the clinical picture and course of the underlying nosology, the nature and severity of complications, worsen the patient's quality of life, limit or complicate the treatment and diagnostic process.

Comorbidity affects the prognosis for life, increases the probability of death. The presence of comorbid diseases contributes to an increase in bed days, disability, hinders rehabilitation, increases the number of complications after surgical interventions, and increases the probability of falls in elderly patients (Munoz E., et.al.1988) [21].

However, in most of the randomized clinical trials conducted, the authors included patients with a separate refined pathology, making comorbidity an exclusion criterion. That is why the listed studies devoted to assessing the combination of certain individual diseases are difficult to attribute to studies of comorbidity in general. The lack of a single comprehensive scientific approach to assessing

comorbidity leads to gaps in clinical practice. The absence of comorbidity in the systematics of diseases included in the International Classification of Diseases X revision (ICD-10) cannot go unnoticed. This fact alone gives grounds for further development of the general classification of diseases.

Despite the many unsolved patterns of comorbidity, despite the lack of its unified terminology and the ongoing search for new combinations of diseases, based on the available clinical and scientific data, it can be concluded that comorbidity has a range of undoubted properties that characterize it as a heterogeneous, frequently occurring phenomenon that increases the severity of the condition and worsens the prognosis of patients. The heterogeneity of comorbidity is due to a wide range of causes that cause it(Zhang M., et.al. 2009; Wang P.S..S, et.al. 2005) [22, 23].

There are a number of rules for formulating a clinical diagnosis for a comorbid patient, which should be followed by a practicing doctor. The main rule is to distinguish between the main and background diseases in the structure of the diagnosis, as well as their complications and concomitant pathology (Avtandilov G. G., et al. 2004; Zairatyants O. V., et al. 2008) [24, 25].

If the patient suffers from many diseases, then one of them is the main one. This is the nosological form that, either alone or due to complications, causes the primary need for treatment at this time due to the greatest threat to life and working capacity. The underlying disease itself or through complications can be fatal. The main disease is the one that caused you to seek medical help. As the examination progresses, the diagnosis of the least prognostically favorable disease becomes the main one, while other diseases become concomitant.

The main ones may be several competing serious diseases. Competing diseases are nosological forms that are simultaneously present in the patient, which are mutually independent in etiology and pathogenesis, but equally meet the criteria of the underlying disease.

Background disease contributes to the occurrence or unfavorable course of the underlying disease, increases its danger, and contributes to the development of complications. This disease, as well as the main one, requires immediate treatment.

All complications are pathogenetically related to the underlying disease, they contribute to an unfavorable outcome of the disease, causing a sharp deterioration in the patient's condition. They belong to the category of complicated comorbidity. In some cases, complications of the underlying disease associated with a common etiological and pathogenetic factors are referred to as associated diseases. In this case, they should be classified as causal comorbidity. Complications are listed in descending order of prognostic or disabling significance.

Other diseases that occur in the patient are listed in order of importance. Concomitant disease is not associated etiologically and pathogenetically with the underlying disease and is not considered to significantly affect its course.

The presence of comorbidity should be taken into account when choosing a diagnostic algorithm and treatment regimen for a particular disease. In this category of patients, it is necessary to specify the degree of functional disorders and morphological status of all identified nosological forms. When each new symptom appears, including a mild one, an exhaustive examination should be carried out in order to determine its cause. It should also be remembered that comorbidity leads to polypharmacy, i.e. simultaneous administration of a large number of drugs, which makes it impossible to control the effectiveness of therapy, increases the material costs of patients, and therefore reduces their compliance (adherence to treatment). In addition, polypharmacy, especially in elderly and senile patients, contributes to a sharp increase in the likelihood of developing local and systemic undesirable side effects of medications. These side effects are not always taken into account by doctors, since they are regarded as a manifestation of one of the factors of comorbidity and entail the appointment of even more drugs, closing the "vicious circle".

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