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Application of Cytostatic Therapy in Patients with Primary Myelofibrosis in Young Age

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Annotation: Therapy is one of the main methods of treating cancer and is the first-line therapy for many types of cancer, confirmed by clinical evidence and guidelines. Many chemicals are drugs used for specific types of cancer, but many cancer patients engage in long-term and short-term chemotherapy. This article discusses the use of cytostatic therapy in patients with primary myelofibrosis at a young age.
Keywords: therapy, microorganisms, bacteria, myelopoiesis, hyperplasia, concentration, tendency, granulocytes, aggressive, prognostic;

I. INTRODUCTION

Therapy is the primary method of cancer treatment and the first therapy choice for many cancers, as evidenced by many guidelines and evidence. There are several chemotherapy drugs with mechanisms of action used for specific types of cancer. Oncologists prescribe chemotherapy before surgery or to reduce the size of a large tumor; general slowing of cancer cell growth; treatment of cancer that has metastasized and spread to different parts of the body; or to destroy all mutated and fast-growing cancer cells to prevent a recurrence of the disease in the future;

II. MAIN PART

Therapy is a Latin word meaning internal azoles. The science of therapy is the science of trigeminal neuralgia. Disease is a process that results in a temporary or complete decrease or loss of vital functions of the organism as a result of the harmful effects of the external and internal environment. The disease is caused by the entry of certain types of microorganisms and bacteria into the body and a combination of several other causes (inflammation of the gastric mucosa, gastritis, usually caused by irregular eating, non-compliance with daily routine, smoking, drinking, as well as diseases of other organs). The protective and adaptive properties of the organism are of great importance in combating the emergence and progression of the disease.

Myeloproliferative diseases (MPD) are diseases that occur at the level of clonal hematopoietic stem cells. The proliferation of one or more myelopoietic cells in the bone marrow with signs characteristic of MPZ is maintained by terminal differentiation and is accompanied by changes in the parameters of peripheral blood. According to the 2008 WHO myeloproliferative classification, the disease includes eight nosological forms.

Myeloproliferative marine dromedity conditioned hyperplasia triplet hematopoiesis. Itching, sweating, weakness, increased body temperature, bone pain. Increased breakdown of granulocytes is accompanied by a violation of urate metabolism, which manifests itself in the form of uric acid diathesis, the formation of stones; rupture of the kidneys, gout, gouty polyarthralgia.

Myelofibrosis, also known as agnogenic myeloid metaplasia, is a rare disease that affects the bone marrow, disrupting the body's ability to produce blood cells. Myelofibrosis causes consistent scarring (fibrosis) of the bone marrow, resulting in an abnormal number of blood cells and other serious complications. Some people with myelofibrosis may have no symptoms or require immediate treatment. Others suffer from aggressive disease and suffer from severe anemia, liver dysfunction, and splenic enlargement. Myelofibrosis can be diagnosed by a blood test and a bone marrow biopsy. A known therapeutic treatment is stem cell transplantation.

Myelofibrosis, also known as agnogenic myeloid metaplasia, is a rare and potentially serious disease of the bone marrow. This leads to the appearance of fibrous tissue scars in the bone marrow, which in turn leads to the formation of abnormal blood cells in the bone marrow. This can lead to cell count problems and other serious complications, some of which can lead to death.

This disorder affects both men and women. It can occur at any age, but is usually diagnosed in people between the ages of 50 and 70 years. Only three out of every 200,000 people suffer from this disease, which occurs in several different forms.

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The term cytostatic refers to an aggressive toxic substance used for medical treatments. Cytostatic drugs slow down or stop their growth by analyzing the division of certain cells.

Depending on the specific mechanism of action, cytostatic drugs interfere with cell division in a variety of ways, such as disrupting metabolism or disrupting cellular DNA. Cytostatics do not have a local effect on certain parts of the body, but affect the whole organism. Their targets are especially fast-growing cells.

Cytostatics are mainly used in the treatment of cancer. As part of therapy, they are used as active substances to fight rapidly spreading tumor cells and thus provide a complete analysis of tumor growth.

In addition to surgery and radiation, chemotherapy is one of the three main pillars of cancer treatment. Unlike surgery and radiation, this is a systemic therapy that affects the whole body, for example, metastases of unknown localization. About 200,000 cancers are treated in Germany every year.

Most people with cancer undergo at least one chemotherapy. The era of cancer chemotherapy began in the 1940s. Today, about 50 approved cytostatic drugs are used in chemotherapy. Over time, new cytostatics have been developed on the one hand, and certain substances on the other, for example, have been revised to reduce side effects. In rare cases, the cytostatic was replaced with a new or improved version.

There are also many different chemotherapeutic drugs on the market today that make it difficult for physicians to choose the best drug or combination of drugs for a patient. use classification according to. However, these categories are often combined.

Some antibiotics can be used against cancer cells. Anticancer antibiotics can act through a variety of mechanisms. These include acting as a DNA intercalator or preventing DNA repair along with other mechanisms of action.

Mitosis inhibitors inhibit the ability of cancer cells to divide. They do this by blocking cell function, which divides the increased genetic material into daughter cells.

Taxanes are a group of substances that alter the cytoskeleton, and cell division no longer occurs. Topoisomerase inhibitors interfere with the function of certain enzymes that break down and reattach DNA strands during cell division.

The main challenge in planning chemotherapy is to find appropriate medications to treat a specific type of cancer. Here, the individual factors of the patient should also be taken into account to determine the performance of the cytostatic. In most cases, a combination of not just one but several cytostatics is used.

Various factors, including the type and stage of the cancer, determine the type of chemotherapy used. Other factors such as how patients respond to medications, patients 'health and ability to take medications, and the types of medications given should be considered. destroying cancer cells.

The following table lists the most commonly used cytostatic drugs selected according to the groups mentioned above. You will also find information on which of the two diagnostic test methods can test the effectiveness of each drug. We confirmed all widely used cytostatics in the CTR test for the treatment of solid tumors. However, a suitable biomarker for each cytostatic agent in determining the tumor profile has not yet been found. Our partners regularly evaluate new biomarkers proposed in the literature for their clinical relevance. After screening, the biomarker is included in the tumor profile analysis.

Possible Side Effects of Cytostatic Drugs Because cytostatics affect rapidly dividing cells, many side effects can affect healthy cells such as hair, bone marrow, and mucous membranes. 'collected in sections. As a result, several unwanted side effects may occur. The most common side effects of chemotherapy are: Many patients suffer from nausea and vomiting, and it is possible to take the medications that come with them. In most cases, therapy is accompanied by hair loss. The mucous membranes in the mouth and throat can cause painful inflammation. This can be prevented with proper preventive measures.

Treatment of thrombocytopenia in the postoperative period of platelet transfusion center (CT) in patients with cytostatic bone marrow aplasia (CM) and acute myeloid leukemia (AML). However, the TTC does not always come with expectations. in the form of an increase in the rate of thrombosis. peripheral blood pressure (PC).

III. CONCLUSION

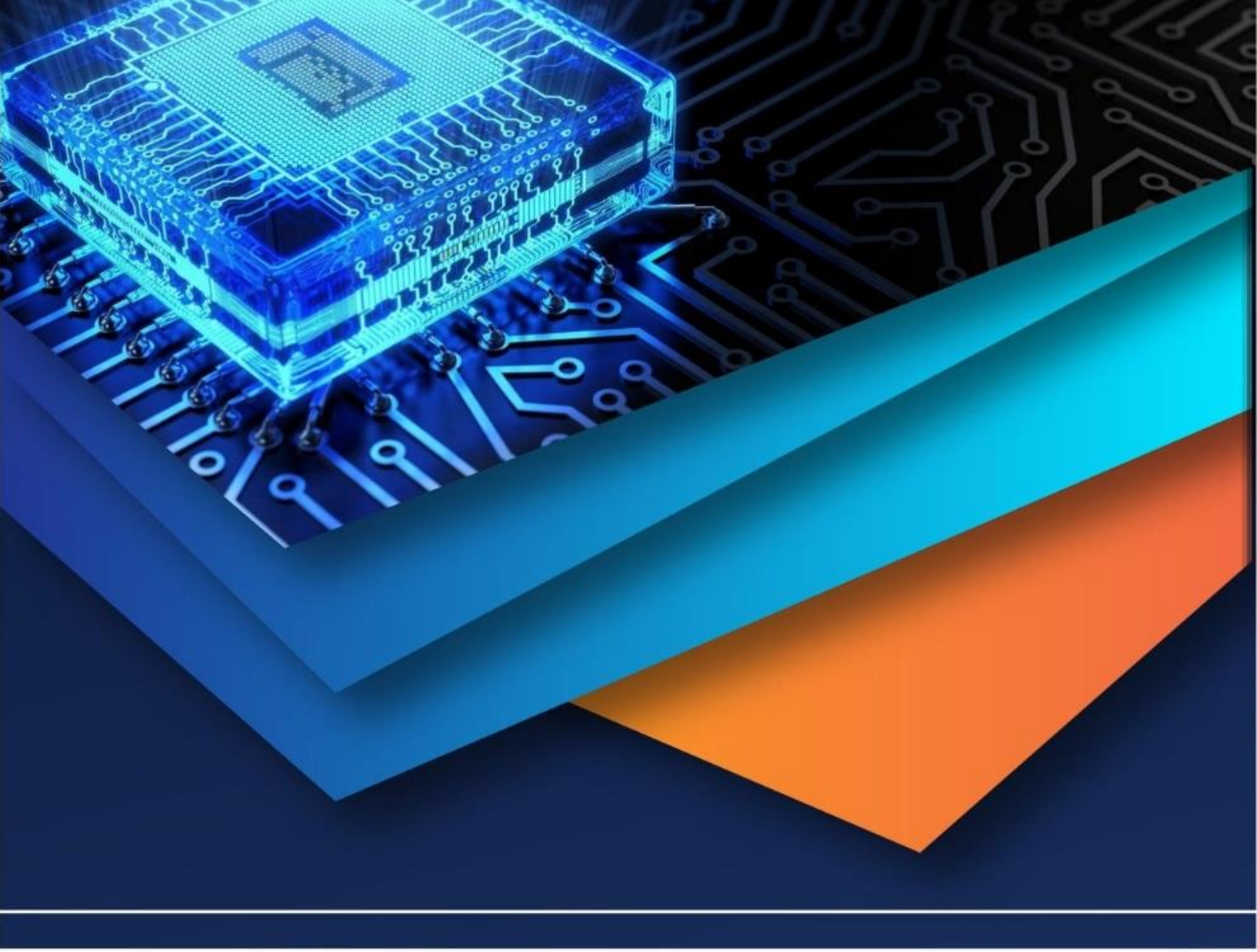
In conclusion, the use of cytostatic therapy in patients with primary myelofibrosis at a young age is still widely used, and its effectiveness is also beneficial. It is also possible to distinguish characteristic signs of ferrokinetics at the onset of the disease in patients with myelofibrosis at a young age. For example; anemia of chronic diseases in the composition of anemia syndrome and high concentrations of serum. Adequate assessment of iron metabolism requires not only a comprehensive study of all available indicators of ferrokinetics, but also to take into account the dynamics of their interaction, trends in joint growth or decrease in activity.

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