



Competent Treatment Sharp Myeloblastic Leukosis at Solar Children (a Syndrome of Down) till 2 Years

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Prehistory

This little girl the Liana have betrayed three times - at first biological mother when has learnt, that the child was born with a syndrome of Down, then reception parents when have learnt, that at the girl in 10 months has arisen leukosis. It lived the small life (hardly 2 years there are less) in hospital with another's people. This article I devote to this girl who has untimely left from us, and also those children where in Russia doctors of official medicine could not, have not wanted to treat and cure competently.

Once it will meet mum, and will ask it why she has thrown it?

Introduction

Frequency lifting oncopathology as a whole across Russia including leukosis at children in the nineties the last century and after 2000 it is connected with consequences of Chernobyl accident in 1986 and inoculations, in particular, BCG (vaccine) [1]. Every fourth child with oncology suffers from a tumour of system of blood.

Now an overall objective at therapy children's leukosis (leukemia, myeloid) is not reception of time remission, and full treatment of children. For this purpose the modern medicine has all necessary means. At optimum treatment sharp lymphoblast leukosis at children approximately in 70 - 75% full treatment can be reached. In a case myeloid leukosis - 68%. But the medicine of Russia does not use it, unfortunately. Doctors do not consider by-effects and interaction of medicines, and after all it is very important.

At newborns with a syndrome of Down often develops transitory leukosis or myeloproliferative a syndrome with leucocyte's, blast cages in peripheral blood, and also an anaemia, a thrombocytopenia and hepatoesplenomegalia. These clinical signs are independently resolved in some days or weeks. In some cases the newborn with myeloproliferative a syndrome appoint a transfusion of preparations of blood, however the chemotherapy is not shown them. At the same time the specified category of newborns

demands regular supervision of experts and screening as at 20 - 30% of persons within first several years of a life develops typical sharp leukosis (Avdeeva TG., *et al.* 2015).

The general symptoms of leukemia in children's

Children can cry for no apparent reason, they cannot tell, that is ill and where is ill. It is required to differentiate a condition of children of norm, pre-illness and illness without the aid of small patients, they cannot tell and complain.

Thus, it is necessary to differentiate a pathology from collateral and toxic action cytostatics which in Russia are applied, though, there is also an alternative treatment. It is sparing also can cure (author's methods).

In most cases the clinic leukosis develops gradually and is characterised by nonspecific symptoms:

1. Asthenia a child;
2. A dream infringement;
3. Decrease appetite;
4. Nostalgia and arthralgia;
5. Motiveless body rises in temperature.

Sometimes leukosis at children demonstrates suddenly with intoxication or hemorrhagic a syndrome

At children suffering leukosis, the expressed pallor of integuments and mucous membranes is marked; sometimes the skin gets an icteric or earthy shade. Owing to leukemic infiltration mucous membranes children quite often have gingivitis, stomatitis, a tonsillitis. Leukemic hyperplasia lymph nodes it is shown lymphadenopathies; salivary glands - sialadenitis; a liver and a spleen - hepatoesplenomegalia.

Population leukosis cages

Growth leukosis populations occurs from one cage, and growth rate depends on a share actively peripheral cages, them generation time, number of cages with the limited life expectancy, speeds

of loss of cages. When leukosis population reaches certain weight, there is a braking of a differentiation normal stem cages and sharply their normal production falls. Clinical symptoms at children are caused by degree infiltration a bone brain blast cages and extra-medullary process distribution.

In an illness current allocate following periods:

1. Pre-leukosis,
2. Sharp,
3. Remission,
4. Relapse,
5. Terminal.

Pre-leukosis the period practically is not diagnosed, as specific symptoms are absent. It is necessary to find early signs of illness when it is quickly possible to help (the note of the author).

But for this purpose also screening of solar children is necessary not to pass a pathology. It is necessary to do the analysis of peripheral blood. There pre-pathology will be visible.

The sharp period of the majority of children has the rough beginning and the increase in lymph nodes, parenchymatous bodies) and suppression normal hemopoiesis (an anaemia, granulocytopenia, a thrombocytopenia) is characterised by polymorphism of clinical symptoms which are caused by processes hyperplasia's a tumoral fabric (blast transformation of a bone brain. The earliest are symptoms of the general intoxication, an anorexia without considerable loss of weight of a body, a pain in bones and joints.

Typical signs sharp leukosis at children - increase in a liver, a spleen and lymph nodes, more often cervical, axillary and inguinal. The simultaneous increase in lymph nodes in submaxillary, parotid and periorbital characterizes areas symptom complex Mikulicz's. Integuments and visible mucous membranes at the majority of patients differ pallor. A characteristic sign is hemorrhagic a syndrome expressed by polymorphic hemorrhages (from petechias to hemorrhages of the large sizes) on a skin and bleedings from mucous membranes (nasal, gastroenteric, nephritic).

For a current sharp leukosis at children it is typical hemorrhagic a syndrome characterised by hemorrhages in a skin and mucous, hematuria's, nasal, uterine, gastroenteric, pulmonary bleedings, hemorrhages in a cavity of joints.

The natural companion sharp leukosis at children is anemich a syndrome caused by oppression erythropoiesis and bleedings. Expressiveness of an anaemia at children depends on degree proliferation blast cages in a bone brain.

Rare manifestations- Changes on the skin and in the subcutaneous fat layer in the form of Lejkemidov, necrotic lesions of the skin and mucous membranes of the oral cavity ("gingivitis", "stomatitis"-from Catarrhal to ulcerative-necrotic) and intestines (enteropathy). Their development is connected with leukemia infiltration of mucous membranes of tissues and vessels, presence of hemorrhages and joining infections. Have Children can be involved in the process of the central nervous system (CNS), genitals, eyes and lungs. Clinical symptoms of lesions of these organs are more characteristic of recurrence of disease.

Their appearance in the initial period of acute leukemia serves as a bad prognostic sign. Changes in the lungs are clinically flowing under the "mask" of bronchitis or small the centre "pneumonia". Radiographically are identified diffuse changes in the interstitium of the lungs in the form of small the centre shadows. The lesion of the central nervous system (illness) is characterized by leukemia "meningitis", "meningoencephalitis" or "encephalitis". Common to all clinical forms are cerebral and meningeal symptoms: rigidity of the neck muscles, a symptom of Kernig, rarer-a symptom of Brudzinskogo, convulsions clonic-tonic character. Characteristic of Neuroleukosis lesions of the cranial nerves. Most often are involved in the process of the VII, XII, III, IV and VI nerves. Illness is accompanied by dizziness, headache, nausea, diplopia, rigidity stiff muscles. Leukemia lesion hypothalamic the brain stems in the form of Diencephal syndrome (thirst, polyuria, obesity, hyperthermia). Involvement in the leukemia process of genital organs is determined palpation to increase and seal the testicles, seed strings in boys and ovaries in girls.

Important! The leading clinical manifestations of acute myeloblast leukemia are anemic and hemorrhagic syndromes. Hepatosplenomegaly is not a diagnostic sign of myeloblast leukemia, but it is observed in 50% of patients.

Intoxication syndrome accompanying the course of leukemia in children, occurs with considerable weakness, fever, sweating, anorexia, nausea and vomiting, hypotrophy. The manifestations of immunodeficiency syndrome in leukemia in children is the stratification of infectious and inflammatory processes, which can take a severe, threatening current. Flexible spruce Children often occurs due to severe pneumonia or sepsis.

Cardiovascular disorders may be expressed by the development of tachycardia, arrhythmia, expansion of the heart (according to the X-ray of chest organs), diffuse changes in the myocardium (according to ECG), the decrease of the emission fraction (according to the Echo-KG).

Extremely dangerous complication - is leukemia Infiltration of the brain, brain membranes and nerve trunks. At infiltration of a substance of a spinal cord it is possible development parapareza feet, sensitivity disorders, pelvic disorders.

Blood changes in disease

In acute leukemia in children are identified characteristic changes in the overall blood analysis: anemia; Thrombocytopenia, Reticulocytopenia, high speed of subsidence erythrocytes (SSE); leukocytosis of varying degrees or radiation (rare), Blastemija, disappearance of basophils and eosinophils. A typical sign is the phenomenon of "leukemic failure"- the absence of intermediate forms (young, sticks nuclear, segment nuclear leukocytes) between mature and Blast cells.

Sternal puncture and myelogram research are mandatory in diagnosing leukemia in children. The decisive argument in favor of the disease is the content of progenitor cells from 30% and above. In the absence of clear data for leukemia in children according to the results of bone marrow research, resort to trepanobiopsia's (heel bone puncture). Cytochemical, immunological and cytogenetic studies are performed to determine the different variants of acute leukemia in children.

The auxiliary diagnostic value is ultrasound of lymph nodes, ultrasound of salivary glands, ultrasound of the liver and spleen, ultrasound of the scrotum in boys, X-ray of chest organs, KT (computer tomography) in children (to detect metastases in various anatomical regions).

Blood changes in disease

Complications of leukemia is anemia, the frequent defeat of the body with viral and bacterial infections, the spread of tumors on other organs and systems of the body (metastases). Without adequate treatment acute leukemia ends lethal due to the body's damage by viral and bacterial infections. At occurrence of the first signs of pathological condition at the child it is necessary to address immediately to the doctor. The main thing, in time to ask for help and observe all the requirements of the clinical pharmacist.

Fungal infections find out tendency to increase due to lower immunity cytostatics, though, give an alternative with increased immunity. But in Intimacy to eat fruits of fruit where there are no chemical additives and fungicides.

Viral infections began to leak more severe, cases of cytomegalovirus infection, herpes. Fever is usually associated with the presence of infection, especially in children with deep neutropenia (less than 500/ μ l).

A common symptom in leukemia are nostalgia and arthralgia. Leukemia infiltration periosteum and joint capsule, bone infarctions and tumor increase in bone marrow lead to the appearance of pain. Pain and swelling joints can be taken for symptoms of rheumatoid arthritis or other ailments.

Complete Remission

At full remission symptoms disappear, including laboratory: blasts in the analysis of bone marrow less than 5%, lymphocytes up to 30%, in the blood can remain mild anemia and thrombocytopenia. In incomplete remission, blood tests and clinical symptoms are normalized, but the bone marrow retains up to 30% blasts.

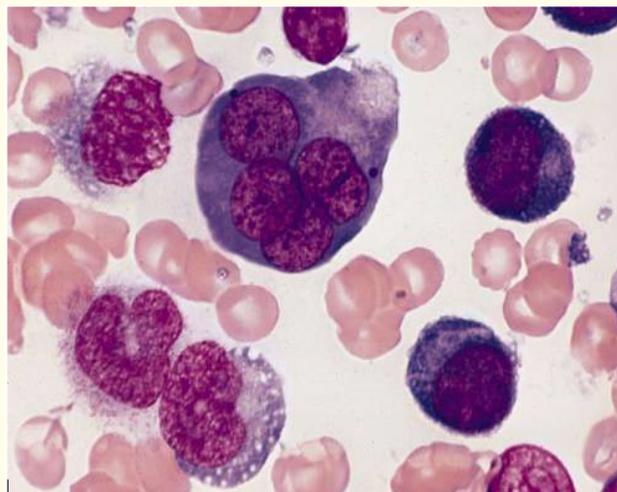


Figure: A smear of peripheral blood in children.

Classification of leukemia in children

On the basis of the duration of the disease emit acute (up to 2 years) and chronic (more than 2 years) forms of leukemia in children.

A special form of acute leukemia in children is congenital leukemia

Taking into account the data of morphological characteristics Tumor cells acute leukemia in children are divided into lymphoblast and not lymphoblast. Lymphoblastic leukemia develops with uncontrolled proliferation of immature lymphocytes-lymphoblasts and can be of three types: L1-with small lymphoblastoma; L2-with large polymorphic lymphoblastoma; L3-with large polymorphic lymphoblast with vacuolization cytoplasm's. In lymphoblast leukemia occurs uncontrolled proliferation (reproduction, growth) lymphoblast (immature lymphocytes), which are three species-small, large and large polymorphic.

In children mainly (in 97% of cases) develops acute form of lymphoid leukemia.

Important! Chronic lymphoid leukemia in childhood does not develop.

On antigenic structure markers Lymphoblast Leukemias are:

1. O-Cellular (make up to 80% of cases);
2. T-cell (from 15 to 25% of cases);
3. B-cell (diagnosed in 1-3% of cases).

Among acute lymphoblast leukemias in children are more common leukemia with cells of type L1.

In a number of nelimfoblastnyh leukemias, depending on the prevalence of certain progenitor cells, distinguish:

1. Myelogenous small differential (M1),
2. Myelogenous of the most differentiated (M2),
3. Promielocitar (M3),
4. Mielomonoblast (M4),
5. Monoblast (M5),
6. Eritromieloz (M6),
7. Megacariocitar (M7),
8. Eosinophilic (M8),
9. Non-differentiated (M0).

In the clinical course of leukemia in children are allocated 3 stages, with regard to which is built therapeutic tactics.

1. **Acute phase of leukemia in children:** Covers the period from the manifestation of symptoms to the improvement of clinical and hematological indicators as a result of therapy;
2. **Incomplete or complete remission:** In case of incomplete remission the normalization of Hemogram and clinical indicators is observed; the number of progenitor cells in the bone marrow punctate is no more than 20%. Complete remission is characterized by the presence in Myelogramme no more than 5% progenitor cells;
3. **Recurrence of leukemia in children:** On the background of hematology well-being there are extra-medullary foci of leukemia infiltration in the nervous system, testicles, lungs, other bodies.

Causes of Leukemia in Children

1. Evidence of hereditary predisposition to blood cancer is the fact of the more frequent development of leukemia in identical twins in comparison with biceps.
2. Down's disease-15 times more often than other children
3. Hereditary diseases (syndromes Li-Fraumeni, Klinefelter (Additional "X" chromosome in boys, violating the development of the male type), Wiskott-Aldrich, Bloom, Shvahmana-Diamond, Nijmegen).

4. Primary immunodeficiency (x-concatenated a-gammaglobulinemia, ataxia-telangiectasia Lou-Barr, others).
5. Polycythemia,
6. Fanconi anemia.
7. Factors of physical (radiation load) and chemical influence. This is evidenced by an increase in the incidence of leukemia after the nuclear explosion in Hiroshima and the Chernobyl nuclear power plant.
8. Secondary leukemia in children who received radiation therapy and chemotherapy as a treatment for another cancer pathology.
9. Pathologies that promote the development of leukemia in the blood system-myelodysplastic, or myeloproliferative syndrome. The role plays a form of syndrome, influencing the increase and decrease of risk.
10. The large mass of the fetus at birth is 4 - 5 kg.
11. Vaccination-any vaccine, but the first is BCG.
12. Doses exceeding 100 are happy to have a dozo-dependent effect on the onset of the disease. Genetic anomaly-trisomy hr21 (Down syndrome) causes an increased frequency of development, although in most cases, the syndrome develops acute lymphoblast leukemia.
13. Ataxia-Telangiectasia, neurofibromatosis Recklinghausen and others.
14. Hematological disorders-aplastic anemia, chronic myeloproliferative syndrome, myelodysplastic condition, paroxysmal night hemoglobinuria increase the risk of acute myeloid leukemia.
15. Leukemic of skin and infiltration gums are usually typical for myeloma-and monoblast variants. The initial defeat of the central nervous system is rare-at hyperleukocytosis and/or monoblast variant.

Peculiarities of leukemia in children

Leukemia in children is 1/3 from malignant tumors.

Chronic forms of the disease in childhood are practically not found

Acute leukemia in children 2 - 3 years more often lymphoblastic. It is more prone to boys with white skin (compared to blacks and Asians).

Myeloid form of acute leukemia is found even earlier: a year, two-with the same frequency among boys and girls. In school age, symptoms of disease are rarely detected.

In Lymphoblast leukemia main are immature lymphocytes (lymphoblasts).

In myeloid form pathology disease develops at the expense of myeloblasts, erythroblast, megacarioblast and monoblast.

Types of leukemia

1. **Acute myeloid (Promyelocyte) leukemia:** Signs of illness are very fast. The patient has anemia, fatigue, pale skin, choking, abdominal pain, bleeding from the nose, gums, the temperature of unknown origin, increases liver, spleen.
2. **Acute myelogenous, lymphoblast leukemia:** It is similar to the previous type, except that there is no choking and abdominal pain.
3. **Chronic myeloid leukemia:** The symptoms often pass unnoticed. Signs of illness appear late when the number of malignant cells already exceeds 1 kg. Often patients complain about fatigue, malaise, shortness of breath, sweating, sharp weight loss, inability to tolerate heat, increase the liver.
4. **Chronic lymphocytic leukemia:** In the early stages of the person does not notice symptoms, except one-the enlargement of lymph nodes. Subsequently, increased fatigue, weight loss, shortness of breath, feeling of overflow in the abdomen is added to this trait.

Acute leukemia does not go into the chronic stage and vice versa

Important! One of the main symptoms that can be suspected of leukemia in humans is an unreasonable increase in body temperature. And the marks on thermometer can vary from 37.4 to 39 degrees depending on whether the infection has joined the body or not.

Acute myeloid leukemia in children Symptoms

At the initial stage, the disease may not have specific symptoms. Often the disease is diagnosed against a long-term infection: the temperature does not decrease, antibiotics do not help. In the blood often anemia and thrombocytopenia. The child weakens (fatigue), adults notice his increased fatigue during the games. The skin becomes pale, dry. The appetite worsens. There are unexpected bruises on the body. There are blunt pains in the upper abdomen caused by increased liver and spleen, possibly increasing the abdomen. There is a rash on the skin, the color changes over the areas of rashes. Often appears subfebrilitate (t body-up to 37.5°C).

Key features expressed myeloblast leukosis:

1. Temperature rise up to 40°C,
2. Headache,
3. Muscle aches,
4. Increased perspiration,
5. Sudden weakness,
6. Increased fatigue,
7. Tinnitus,
8. "Fly" before the eyes,
9. Shortness of breath and high heartbeat in a calm state,
10. Dizziness,
11. The frequency of heart rhythm,
12. Bleeding gums,
13. Frequently occurring bruises.
14. In some cases, there is an increase in lymph, liver and spleen, pain and feeling of heaviness in the abdomen, loss of body weight.
15. Pains in joints and bones concern 30% of patients,
16. Nausea, vomiting,
17. Reduced memory and vision-it manifestations of lesions of the brain and spinal cord, they are observed in 5 to 10% of cases.

These symptoms are caused by the production of non-mature leukocytes and decreased production of red blood cells and platelets.

The pediatrician reveals an increase in lymph on the neck, in the armpit, over the collarbone, in the groin.

If the thymus gland is increased, it can compress the upper hollow vein. At the same time swelling and bruising the head of the child, worried painful cough, shortness of breath.

Symptoms are manifested depending on the age of the patient and the form of the disease.

Important! The main symptoms are bone pain and fever.

Develops anemia syndrome, which feels frequent fatigue, supplemented by loss of appetite, dyspnea's and pale skin. And for lowering the level of platelets, bleeding in the case of damage to the cover of the skin will be long and strong.

There may be nasal bleeding or unreasonable appearance of bruises. For this reason, immunity is weakened, which exacerbates infectious diseases and chronically resistant reactions to drugs. manifests swelling gums, wound mucous mouth.

Important! Quite often the disease begins suddenly and develops violently. The temperature rises to high numbers, there is a general weakness, signs of infection appear in oropharynx (angina, stomatitis), nasal bleeding.

Symptoms

The onset of the disease can be as sharp, and gradual.

It is typical in the clinic of acute leukemia in children hemorrhagic syndrome.

1. The appearance of blood in the urine;
2. Pulmonary bleeding;
3. Anemia (decrease in hemoglobin and the number of erythrocytes in the blood).
4. Anemia is exacerbated by the oppression of blastema cells of the red bone marrow (oppression erythropoiesis- reducing the number of red blood cells). Anemia causes oxygen starvation in the tissues of the body (hypoxia).

Manifestations of cardiovascular syndrome are:

1. Increased heart rate;
2. Disturbances in the rhythm of cardiac activity;
3. Extended heart boundaries;
4. Diffuse changes of cardiac muscle on ECG;
5. Reduced emission fraction on the Echo-KG.

Differential diagnosis of leukemia in children should be carried out with leukemia-like reaction observed in severe forms of tuberculosis, whooping cough, infectious mononucleosis, cytomegalovirus infection, sepsis, which has a reversible transitory character.

Prevention of leukemia in pregnant women:

1. To lead a healthy way of life,
2. Properly asked,
3. More often to walk in the fresh air,
4. Avoid direct exposure to UV-rays (long stay in the sun)
5. Chemical Effects (arsenic, lead, phosphorous compounds, gasoline).
6. Parents should take measures to protect the child from the defeat of viral and bacterial infections.
7. The influence of alcohol and smoking in pregnancy on the occurrence of myeloid leukemia of the child's blood is proved.
8. Hereditary diseases accompanied by failure of immunity are included in high risk factors.

The risk of morbidity in pairs of twin children is studied:

1. In identical twins in case of one child, the risk of pathology for the second is 25%;
2. At no single pairs the risk increases in 2 - 4 times.
3. Accommodation of a pregnant woman in the territory subjected to radiation, increases the risk of lymphoblastic leukemia in the child 5 times, and myeloid 20 times.

4. Carrying out a course of radiotherapy with simultaneous application of cytostatics (Ciclophosphan, Etoposide, Chlorambucil) in the treatment of tumors can result in a ten-year term to a dangerous consequence in the form of myeloid acute leukemia.
5. Increased risk of lymphoblast leukemia in children receiving immunosuppressing drugs after organ transplant. They are forced to be appointed to prevent rejection.
6. Any effects lead to genetic mutations at the DNA level of bone marrow cells. They begin to produce more immature shaped elements.

In myeloid leukemia, children are more likely to recover:

1. With initial leukocytosis less than $100000/\text{mm}^3$;
2. With the found granules-inclusions inside the cells;
3. Suffering from Down syndrome;
4. Having positive shifts after one treatment cycle.

The most adverse prognosis in acute myeloid leukosis concerns patients under two years and over the age of ten. Worsens the situation of complications such as:

1. Increase the size of the spleen.
2. Disturbance of the central nervous system.
3. If swollen lymph nodes are converted into cancer.

If the disease is eliminated by chemotherapy, the recurrence of the disease can be postponed for five years. Only if for several years there are no signs of pathology, it is possible to talk about possible recovery.

If the level of lymphoblast cells is high, the chances of recovery are significantly reduced, and the course of treatment can be quite long. Whether the patient will survive in this situation depends on the presence of concomitant diseases and how the body responds to chemotherapy.

Relapse of Acute Leukemia

This is a new stage of tumor development, when the remission reappears tumor cells in the bone marrow, and outside it (more often in the CNS-illness, genitals, etc). Children are obstructed from everything. Diagnosis is based on data cytological research of peripheral blood cells and bone marrow. Can be limited to the state of peripheral blood, the fence produce painless scarifications. The absence of pain is an important factor in the recovery and survival of such fragile children.

A characteristic clinical sign of acute myeloid leukemia is the presence of more than 30% of progenitor cells with signs of myeloid growth blood in sternal punctate of heels children with anesthesia.

The main ones are a significant increase in progenitor cells in medullar punctate and their appearance in peripheral blood tests. To confirm the diagnosis it is necessary to conduct a comprehensive examination, the main in which is the morphological method. In the analysis of peripheral blood is usually observed decrease in hemoglobin, the number of red blood cells, platelets. Depending on the leukocytosis distinguish cases with normal, reduced ($10 \cdot 10^9$ L and less) and elevated ($20 \cdot 10^9$ /L and more, up to $1 \cdot 10^9$ /L) the number of leukocytes. The increased number of leukocytes ($> 10 \cdot 10^9$ /L) is determined approximately in 1/2 patients, and $> 50 \cdot 10^9$ /L-in 1/5 patients. The absolute indicator of the disease is the appearance of progenitor cells, the number of which can vary (from 1 - 2 to 90% or more). However, there may be cases with the absence of progenitor cells in the peripheral blood. In medullar punctate, which is produced in children of early age (up to 2 years of the heel bone), the number of progenitor cells can fluctuate within 50 - 100%, there is a violation of normal cellular ratios, and Also the reduction or absence of megakaryocyte. Acute leukemia can be diagnosed with a minimum amount of blasts-25%. However, there may be variants with malprocentnym content of pathological cells (20 - 30%). If in these cases the diagnosis is doubtful, it is necessary to trepanobiopsy and histological research of bone marrow. More subtle identification blasts It is conducted on the basis of immunophenotyping and cytogenetic research. Puncture of lymph nodes at their increase, as well as puncture of tumor formations if any, is mandatory for obtaining cytological confirmation of the diagnosis of the disease. In Ray study of the bone system is often discovered osteoporosis in the tubular bones and spine. Changes in the skeleton can be in the form of transverse strips of discharging in metafizar, destructive-hotbed lesions, general diffuse dilution of bone structure and Periostozov, System brevispondilii (Flattening of vertebral bodies). In Ray study of the thorax may be revealed expansion of mediastinum due to increased intrathoracic lymph nodes, when it is necessary to perform differential diagnosis with Hodgkin lymphoma. Spinal puncture allows to diagnose the lesion of the nervous system even in the absence of clinical symptoms. But you can do without a puncture. Illness is visible on behavioral reactions of children. They are obstructed from everything - close by hand, toys, books.

Diagnostics

Peripheral blood tests (with myeloid leukemia in the blood will be a deficiency of red blood cells and platelets)-this should be a cheerleader in terms of the onset of preleukemia.

At the moment of diagnosis in smear is noted the presence of blasts and mature forms of granulocytic series with the absence of intermediate forms ("Leukemic dehiscence"). Anemia is usually

thrombocytopenia. In Myelogramme noted hyper cellular with the presence of more than 20% of progenitor cells, the number of megakaryocyte reduced. About 30% of patients with primary myeloblast leukemia signs blood dysplasia. In sternal punctate and trepanobiopate increased the number of bone marrow cells.

When the number of cellular elements in the spinal is increased exporting fluids are the beginning illness. Most often all this increases the level of protein. However, there may be cases when there are clinical neurological symptoms, and in the cerebrospinal fluid there are no changes cytosis. You should pay attention to the Increasing the amount of protein. With the help of new methods, it is possible to detect even a minimum number of lymphoblast in cerebrospinal. In order to diagnose the lesions of the nervous system are also Roentgen computed tomography, electroencephalography, echoencephalography, resonance tomography.

Other laboratory studies can record the consequences of the infiltration of various organs by leukemia cells and the products of their destruction (author's offers):

1. The increase of uric acid level may be the result of violation of purine exchange in diagnosing the disease or in the initial stage of chemotherapy. Hyperuricemia can lead to renal failure.
2. At the same time, there may be an increase in serum levels of electrolytes (calcium, potassium, phosphorus),
3. Thymulin - on the function of thymus - responsible for the biorhythms of the body.
4. Peroxidase and Chloroacetate Esterase - leukemia lymphoblasts give a negative reaction to peroxidase and chloroacetate esterase, do not contain lipids.
5. Chic-reaction-for lymphoblasts characteristically granular distribution of material in chic-reactions in the form of purple pellets on the periphery of cytoplasm.
6. Lactate dehydrogenase (LDH)-especially in children with high leukocytosis in the peripheral blood, as well as expressed lymphadenopathy and hepatosplenomegaly.
7. Sour phosphatase-high activity of sour phosphatase in lymphoblastic among children with acute lymphoblastic leukemia occurs in 20-30% of cases.

8. Myeloperoxidase - cytochemical marker blasts granulocytic series are lipids, myeloperoxidase. By means of reaction of myeloperoxidase's it is possible to allocate some variants of leukemia, and also to confirm myelogen origin of these cells.
9. Protein BMALL - when allocating protein bmal1, which is responsible for the daily biorhythm of the body, cancer cells begin to grow actively. In order for cells, including cancer, to grow and share, they need to allocate a large amount of proteins and amino acids. However, only a few proteins are correctly folded so the reaction of unfolding proteins is triggered in the body. This reaction slows down the synthesis of new proteins and allows the old to curl to the end, otherwise their accumulation can lead to cell death. Cancer cells have learned to control this reaction so as to slow down the synthesis of proteins if necessary and thus avoid a large number of unfolded proteins. Cancer cells can control this synthesis by controlling their daily biorhythms, which are closely related to the reaction of unfolded proteins. This ability helps them survive in deadly conditions for conventional cells. During this reaction, the level of Bmal1 protein, which is responsible for daily biorhythms, and in the night and daytime hours remained low, although the night was to rise. Cancer cells did not give the reaction of the unfolded proteins to complete, so that the protein bmal1 not start synthesis and did not prevent the accelerated growth of the tumor. If you restart these biorhythms in cancer cells, you can slow down their division (Juven BU, 2017). But for now, it can be investigated only for scientific purposes.
10. Immunoenzyme analysis (IEA) - diagnostic method, which is used to diagnose infections, hormonal and immune disorders, oncological diseases in laboratory conditions. The method allows to detect antibodies to infection already in the early period of the disease. This method refers to indirect diagnostic methods, as it reveals the immune response of the body. The number of T- and B-lymphocytes, their ratio and other parameters is important. When the infection is attached to the first after infection in the body begin to produce IgM antibodies. Their availability is an indicator of the disease in any case. In the body of a healthy person this class of antibodies is absent. These Immunoglobulins are present in the blood serum for about 5 - 6 weeks. The disappearance of Ig A speaks of the destruction of the infection. The G-class immunoglobulins present in the blood indicate that the person has either already undergone the disease or is a carrier of the infection. These antibodies begin to be produced after the antibody class M, with most diseases at 3 - 4 a week after infection. Their presence in the body is possible for several years. If the analysis of IEA is made in children under 1.5 years, the following feature should be considered: the blood of the child contains IgG mother to various infections. This does not mean that the child is ill. In this case - this is, rather, norm. The presence of IgM is evidence of intrauterine infection or infection acquired after birth. IgM mothers cannot penetrate the body of the child through the placenta. Take into account the child's nutrition. How is the child trying? Mother's or artificial milk?! When feeding with breast milk immunoglobulins (Ig) may be in the blood. With artificial feeding Ig G could be if the infection is joined. Need differential diagnosis and dislocations infections. The table 1 shows the possible combinations of the presence or absence of antibodies in the body of 3 classes and their interpretation.
11. Vitamin A concentration in the blood plasma, but in the blood vitamin A transitory.
12. Author's methodology - clinical signs of hypovitaminosis A - painless.
13. Cortisol-3 times higher in the evening than in the morning - desynchronize in the disease.
14. Non-specific esterase, suppressed sodium fluoride (NaF)
15. Antilozocim - shows the activity of bacteria.
16. Immunophenotyping for the diagnosis of acute myeloid leukemia allows to determine the linearity and/or stage of differentiation blasts, starting from the level of stem cell-predecessors. The study of karyotype progenitor cells allowed to reveal the natural changes characteristic for the individual variants of acute leukemia.
17. The use of growth factors (interleukin-3, G-CSF, GM-CSF) in patients is important in scientific respect, and the answer is related to the biological characteristics of leukemia cells. This study will allow the use of these growth factors in children.
18. Flow Cytometry to detect surface antigens.
19. Chromosomal and molecular genetic methods of research.
20. All parameters I count on my program.
21. As few painful analyses and studies as possible!
22. Clinically Advanced blood test - use painless scarifier.
23. Biochemical analysis of blood - if necessary.
24. Urine sowing - on non-specific and specific flora.
25. Immunogram - 2 and 3 levels of difficulty.
26. Decrease of melatonin concentration and definition of its metabolite.

27. Interferon and interleukin-1 β -parameters Inflammation.
28. Cytogenetic Research in 70 - 80% of patients can identify nonrandom acquired chromosomal aberrations. Some of them, in which formed chimerical plum protein, can serve as a marker of the presence of tumor clone. Data cytogenetic studies are used to clarify individual options of the disease, to determine the prognosis of the disease, as well as to control the quality and effectiveness of therapy.
29. Protein fractions show the severity of the inflammatory process.
30. Topoisomerase II α -protein - play an important role in the processes of growth and cell division, They are often the targets of various medications – Topoisomerase’s inhibitors.
31. Cytometry is associated with the transmission of the laser beam through the pre-treated antibodies blood. The method allows to determine the saturation of DNA cells. This is important for the treatment process (such cells are more susceptible to medications).
32. Chest radiography It is possible to diagnose increased lymph in the thoracic and abdominal cavity, thymus glands. This sign is confirmed by magnetic resonance and computed tomography.
33. Ultrasound helps to confirm the enlargement of the liver and spleen, large lymph.
34. Bone tissue scans are performed for differential diagnosis with bone tumors, infectious inflammation, and unclear diagnosis.
35. Light microscopied.
36. Echo-KG. MRI, KT.

IgM	IgG	Each	Decoding
-	-	-	No immunity to infection
-	+	-	There is postvaccination or post-infection immunity
+	-/+	-/+	Acute infection
+	+	+	Exacerbation of chronic infection
-	+/-	+/-	The presence of chronic infection

Table 1

Important! To distinguish myelogenous leukemia from other problems of blood will help light microcopying and a stream cytometry. The patient passes cytochimia’s and cytostatic’s bone marrow and contained in the blood leukocytes.

Prognosis of Treatment

Most researchers believe that early response to therapy (according to bone marrow on the 15th day of treatment) is a favor-

able predictive symptom for long-term survival of children. According to statistics, girls are more likely to recover completely than boys.

Acute Myeloid Leukemia

Immunological markers of acute myeloid leukemia can be divided into the following groups: Common mieloid, Stereospecific and Interspecific.

The most common and widely used to confirm the myeloid (Granulocitara and glandular) nature of leukemia are the antigens of clusters cd13 and cd33, slightly less used cdw65. The evaluation of these three markers allows you to confirm Mieloid the nature of progenitor cells in 98% of cases in children.

Stage-specific markers of Myeloblast leukemia are antigens that appear or disappear as differentiation myeloid cells. The most famous are antigens CD34, cdllb, CD14, CD15.

To a line-specific marker used in Immune diagnostic acute myeloid leukemia in children, are first of all antigens on the basis of expression of which diagnosed erythroid and megacarioblast variants of illness.

Prediction factors of acute myeloid leukemia are less studied than in children with acute leukemia in general. Given the heterogeneity of acute myeloid leukemia, morphological FAB-variant is the main factor of prognosis. In a group of patients having FAB-M1 morphological variant, patients with the minimal cellular differentiation (without sticks Auer) were attributed to high risk. In the group of patients having FAB-M2 morphological variant, the level of leukocytes plays a big role in the development of relapse and the achievement of remission later, than 10 weeks after the start of treatment. In patients with the morphological version of the FAB-M3 and thrombocytopenia Pathology of the coagulation system, the disease often ended in death due to the expressed hemorrhagic syndrome in the first phase of treatment. However, these patients have a longer permanent survival rate provided that full remission is achieved and the coagulation disorder is managed. Among the patients with the morphological version of the FAB-M4 there is a group of patients with the content of atypical eosinophils in the punctate bone marrow more than 3%, which has a better prognosis than a group of patients without eosinophils. The morphological version of the FAB-M5 is predictive unfavorable.

High risk and early mortality in the M5 are especially common in patients with high leukocytosis and extra- medullar organ lesions. In the morphological version of the M5, chromosomal aberrations of the 11th pair are often found: t (9; 11) and T (11; 23), which is also an indirect prognostic bad sign.

Described reproducible immuno-cytogenetic characteristics for some FAB-options: M2 with Auer sticks, MH, M4 with eosinophils. The presence of chromosomal aberrations typical for these variants: T (8; 21), T (15; 17), INV (16), is associated with longer survivability, which is largely determined by the response to inductive therapy. For T (8; 21) is characteristic of expression cd13 or CD34 in the absence of markers glandular line (CD14 or CD4). Typical for the variant M3 translocation (15; 17) is connected with Immunophenotypes HLA-DR-, CD34-, CD14- and CD13+. In case of M4 with eosinophils Inv (16) The monocyte marker CD14 (or CD2) with antigens CD34 or CD13 is noted.

The treatment is divided into several stages:

1. Remission activation,
2. Fixation of remission,
3. Prevention of complications,
4. Maintenance of remission,
5. Antibiotic - from 1-year life - Sangvirin.
6. Antivirus - Echinacea and others.
7. Immunotherapy - Interferon – gamma-Interferon and vegetable immunomodulators.
8. Herbal medicine and Fitodeztherapy-gathering of medicinal plants.
9. Trans-Retinoic acid - Vesanoid.
10. May application of plant cytostatics (Katarantus Pink (Periwinkle Pink) - he cure disease and given analgesia. Contains Vincristine natural. But at elevated temperature of extraction from a plant it is impossible to apply.
11. Vincristine Synthetic - it is better to not use small children. A formidable complication of therapy is increased pressure with cramps, transient blindness.
12. Drugs melatonin's - Melaxen.
13. In some cases - Valproic acid (syrup Depacin's).
14. Antimetastasis Drugs - Herbal medicine.
15. Detoxification Therapy Endotoxins tumors - Herbal medicine.

Treatment of Acute Myeloid Leukemia

The direction associated with the use of differentiating agents, such as isomers of retinoic acid, has achieved the greatest result in the treatment of acute promyelocytic leukemia. With chromosomal aberration T (15; 17), corresponding to the MOH FAB, the point of

rupture of chromosome 17 involves a gene corresponding to the nuclear receptor alpha-retinoic acid, which allows to restore the affected gene in the treatment of promyelocytic leukemia Retinoic acid and avoid hemorrhagic complications. The number of complete remissions in the application of isomers of retinoic acid varies from 87 to 98%. But why don't doctors use Vitamin A for the therapy of sunny children? It's easier and painless for them, these crumbs. Cytostatics themselves give the toxicity from which the children die.

Retinoid Acid can combine with chemotherapy Anthracycline's but effect Toxic action Anthracyclines differs from therapeutic and is caused by multiple effects on cardiomyocyte's, including apoptosis, changes in the homeostasis of iron, dysregulation calcium homeostasis and mitochondrial dysfunction [2], so the possibilities of using cytostatics from different groups are limited. We need to look for other therapeutic possibilities.

Symptoms of acute myeloid leukemia by analogy with acute lymphoblastic leukemia is caused by the substitution of bone marrow tumor cells with subsequent insufficiency of bone marrow. All manifestations of general leukemia, caused by suppression of bone marrow function, are characteristic.

Myelogenous leukemia-has its own clinical signs:

1. Subcutaneous nodules, a symptom of "pancakes with blueberries" (red, brown or violet knots in combination with a hemorrhagic rash),
2. Infiltration gums
3. Laboratory manifestations of the combustion engine-syndrome, the most characteristic of acute promyelocytic leukemia,
4. Isolated tumor formation- leukemias (glaucoma, or Granulocytic sarcoma). In some cases, leukemia develop and without lesions of bone marrow in patients with M2-a variant of acute myeloid leukemia by the classification FAB or with translocation t (8; 21).

Treatment of Acute Myeloid Leukemia

High dose polychemotherapy allows to achieve remission in 80% of cases. About 10% of children die from cytostatics and their toxicity, infectious complications or bleeding during treatment.

Transplantation of red bone marrow or blood stem cells from close relatives after completion of polychemotherapy allows to achieve long-term permanent survival in 60 - 70% of children. Down syndrome increases the risk of acute leukemia by 15

times. The ratio of children suffering from these forms of disease among patients with Down syndrome is similar to that of the main population.

The effectiveness of treatment of acute lymphoblast leukemia in children with Down syndrome does not differ from that of the rest of the population of the appropriate age. Unfortunately, the genetic anomaly indicated increases the sensitivity of the Patients-to and other antimetabolites, so the dose of these drugs in the process of Polychemotherapy should be reduced. The prognosis with acute myeloblast leukemia and Down syndrome is much better in comparison with persons without genetic anomalies. The survivability of these patients is over 80%. In addition, at the end of the first stage-remission induction-supporting chemotherapy requires less doses of drugs. All should be considered in the therapy of solar children.

Describe Alternative Treatment

Up to 1 year, and acute period of illness is usually for 10 months of children's life, it is possible to drip into slices of bread doses of vitamin A. Hair fall out, but then after the treatment grow up. But trans-Retinoic Acid For today is the only Pharmacogenetic a medicine.

Pure Retinoic acid is an incredibly effective cell ingredient that is able to connect with almost any cell receptors and to convey to them the information that cells should behave as young. It also functions as an antioxidant, neutralizing free radicals.

Biochemically Retinoids and pure retinol work the same way. But to wait for the visible effect of the work of retinoid, need time, because they are weaker than pure retinol (Heidi Valdof, 2015). You can get better results from prescription drugs with retinoic acid - Tazarotene and Tretinoin. But, if children have sensitive skin, the acquaintance with Retinol is better to start with soft non-prescription forms with Retinoids. Treatment retinol can be carried out in the evening. Sunlight decontaminates Retinoid acid, so in the daytime such means do not work. First apply once a week, tracking the reaction of the body and skin, gradually move-3 times a week, after the skin gets to Retinol's, it can be used every other day. This gradual introduction of retinoid allows the skin to adapt to it without negative organ and skin reactions.

Interact with cells Vitamin A can only in the form of Tretinoin (or (trans)-retinoic acid). Cells have receptor (retinoid acid receptors- RARs and retinoid X receptors-RXR), which "catch" signals from Tretinoin.

Natural retinoids "include" all receptors. Synthetic selectively "include" strictly defined receptors. That is why it is better to use natural vitamin A.

Natural Retinoids Easily destroyed in the light, so you need to apply them at night-in the evening kids eat a piece of bread and vitamin A. Natural Vitamin-Tretinoin is an "active" form of vitamin A. Tretinoin (trans-retinoic acid) is a natural ionic form of vitamin A.

Natural Pass a long way of metabolism: retinol palmitate-> Retinol-> Retinaldehyde -> Tretinoin.

Synthetic Turn (biotransformation) directly: Isotretinoin-> Adapalene, Tazarotene-> Tretinoin.

Retinol is formed in the body from its predecessor beta-carotene.

The food source of retinol are the carotenes of vegetables and retinol ethers of animal tissues.

Of these in the epithelium of the intestine formed retinol, which by oxidation is converted completely into all-trans Retinoic Acid (ATRA) contained in the blood plasma in the concentration of 1.5 - 3.0 ng/ml. After ingestion of a single dose ATRA 45/m² in blood plasma is formed peak concentration-1 μg/ml. If this technique is combined with the peak (biorhythms) of the tumor, then gradually this vitamin will cure the disease. ATRA quickly excreted from the plasma, because transitory in the blood. Half-life period (half-life elimination period) - 45 minutes. After 12 hours of concentration ATRA decreases to the initial level, so you need to give a dose of 2 admission or even better one time to give a double during the breeding hours of the tumor - evening. ATRA Enters the portal system, there is a rapid biotransformation of vitamin B in the liver by oxidation and glucuronidation cytochrome -450. There is no effect of accumulation in tissues and equilibrium concentration in them. Plasma concentration of vitamin increase antifungal drugs (Nizoral, Fluconazole, Itraconazole). This circumstance can be used when it is necessary in a clinical situation.

Other retinoids fall directly into the lymphatic duct. Other retinoids will act more effectively as they bypass the liver. This will be noticeable during drug therapy and analysis. All patients respond individually to different medications. In addition, you need a diet. This is necessary to achieve the desired concentration of vitamin A in plasma's blood and in the tissues of patients. From food vitamin A is assimilated better and circulates in the blood longer. This circumstance should be used to increase the effectiveness of treatment in young children.

Intracellularly retinoic acid binds to proteins cramps (cell proteins). If treated daily ATRA then, after 1-2 weeks of treatment the concentration of the drug decreases 5 times or more compared to the first week of treatment (phenomenon of tolerance). This is not enough to provide a positive effect on leukemia cells. Or you need to increase the dose, but very individual approach.

The phenomenon of tolerance is due to reduced absorption of the drug, increased activity cytochrome-450, lipid hydroxyl peroxide's and increased CRABPs. In diagrams ECOG Induction, induction of supportive treatment, consolidation on the background of treatment of chemotherapy with vitamin A was more effective-75%, than only treatment Cytostatics-18% (Cytarabine, Daunorubicin) $P = 0,003$.

It should be noted that ATRA after achieving consolidation remission statistically reliably reduces the number of relapses. The drug causes the depletion of differentiation residual leukemia cells. The application is long, but not daily. 5-day course is worse (60% efficiency) than long course (87% efficiency). Survival and cured most are higher if vitamin A is used long-term (74%).

Retinol acetate - salt of acetic acid not contained in the human body at all. It's better not to buy it. Retinol palmitate is - quite physiological saturated acid, which in the process of decay is transformed into unsaturated acids, necessary for the body.

Retinol palmitate is considered more natural for the human body, but it is not necessary to forget that both substances (and acetate and palmitate) are not natural, but synthetic vitamins. It is better to receive the necessary and natural dose of vitamin from nutrition.

Diet for Sunny Children with Vitamin A

1. All **fruits and vegetables with yellow-orange color**: carrot, bulgarian pepper, apricot, peaches, pumpkin, melon, buckthorn, rosehip.
2. Some **green vegetables** also rich in Vitamin A: broccoli, spinach, green onions, sorrel, parsley and even cabbage.
3. Products **animal origin**: egg yolk, beef liver, butter and fish oil are the leaders in vitamin A content.

Since vitamin A is a soluble vitamin, it is better to take vegetable food with a small amount of oil. Make a vegetable salad with the addition of natural olive oil, and from fruits containing vitamin A, it is better to make a dessert with sour cream or natural cream. So, vitamin A is better internalize in the body.

Vitamin overdose A - leads to bleeding from the nose, violations of blood clotting, pain in the bones and muscle stiffness, nausea and vomiting, discomfort in the stomach, dizziness, fatigue and irritability, anorexia, a slight rise in temperature, abundant Perspiration. Attention! Masking the side effects of vitamin-A may erroneously give false information about the disease and the forced appointment of Cytostatics. But other methods of control should protect against it. You need to reduce the dose of vitamin A.

It is not necessary to chase the "pure" vitamin A, it is not necessary also abusing its synthetic analogues. Although, this treatment is better than cytostatics.

Herbal medicine for children, which contains the maximum number of ingredients originally containing retinol or carotene:

Sage, plantain, leaves Bearberry, mint and clover, root burdock, fennel, hops, horsetail, kelp, lemongrass, nettle, oats (natural antibiotic), raspberry leaves, hips.

In order to have the strength of the child to fight the disease, you can use the extract Rhodiola pink-drops - 1 drop for the year of life of the child. And, better in the months before the day of birth. It works better.

Biological rhythms of functions of immune system and possibility of their regulation in patients with malignant neoplasms (review of literature and results of own researches).

The function of hypothalamus, epiphysis, thymus, adrenal glands and others is important. It is necessary to learn to define biorhythms of tumor reproduction and to treat it in these hours and days to get the maximum effect of effective treatment of tumor itself, with minimal risk of side and toxic effects of the most conservative therapy. So far, the control of peripheral blood of small patients and their behavior. You can judge by these parameters. Vitamin A - appoint only for the night. Cytostatics in the morning without application of daily intravenous infusions. It's works.

The decrease in the level of melatonin in the tumor process is due to the weakening of its synthesis in epiphysis as a result of decreased activity of key enzymes, the number of pineal β -adrenoreceptor and/or their sensitivity to the stimulation of norepinephrine, with imbalance of neurotransmitters in the brain and with the change of metabolism of this hormone.

The oppression of the Melatonin formation function of epiphysis accelerates the development of tumors, while its amplification or the introduction of exogenous Melatonin act in the opposite way [3].

Melatonin has a synchronic effect on the changed amplitude and the phase of rhythms accompanied by an increase in their life expectancy, a decrease in the mass of the tumor, Anti-metastatic Effect [4]. Drugs Melatonin levelling Desynchronize, caused by the disease. To one of the systems of the body, the functional state of which is normally subject to rhythmic fluctuations, include the immune.

Thymic Serum factor (FCA), or thymulin, which is a highly active hormone of this gland, affects all stages of differentiation T-lymphocytes, functional properties of their regulatory subpopulations, activity of macrophages, EKK (Natural Cells-Killers) and others.

Installed that in young healthy people the endocrine function of the thymus is activated at night and weakens in the daytime. The level in the blood FCA fluctuates also during the year, making respectively in the spring, summer, autumn and winter 3.8 ± 0.6 ; 4.7 ± 0.3 ; 5.2 ± 0.3 and 3.3 ± 0.3 . This autumn the hormone content is higher than in winter and spring, and in summer is higher than in winter ($p < 0.05$).

It turns out that the increase in blood level FCA night combined with an increase in the number of T-lymphocytes, and in the autumn-T and B-lymphocytes, as well as the increase in the concentration of IgG and the decrease in the number of T-suppressors.

In young healthy people biorhythms of indices of cellular and humoral links of immune system are associated with peculiarities of rhythm in blood level of thymic hormone.

The peculiarities of circannual fluctuations in the number of T-lymphocytes in the peripheral blood of cancer patients largely resemble those of the Thymic hormone level. In patients the number of T-lymphocytes decreases in autumn, the seasonal peak of the indicator values is shifted to spring. Changes in seasonal fluctuations in the number of T-lymphocytes in the blood register already in precancerous diseases.

In children with preleukemia-T-lymphocytes in the autumn almost do not react [5], despite the sharp decrease in their number, so in autumn immunomodulators cannot be used. Moreover, T-suppressors prevail. It is possible to apply Immunomodulators - in spring, in winter.

Against the background of changes in the number of B-lymphocytes in the blood is observed monotony of oscillations, the displacement of its seasonal acrobat's or inversion of rhythm. There is a steady tendency to decrease the concentration of IgG in winter and no changes in the level of Interferon's and IL-1 β throughout the year.

Presence in patients with cancer correlation relationship between the FCA of the titer and the number of T-lymphocytes, including with regulatory functions, gives the reason to believe that their rhythms in malignant neoplasms are interrelated. Moreover, in the implementation of the effects of thymus hormones on T-lymphocytes is important not only the time of their introduction, but also the synchronization of the rhythm of the production of hormones and the sensitivity of lymphocytes to their influence, which may be due to the cyclicity of expression on T-lymphocytes appropriate receptors. Violation of the relationship of biorhythms level in the blood thymic hormone and the seasonal sensitivity of T-lymphocytes to its effect is characteristic of both tumor and pre-tumor diseases.

In the body, the thymus hormones control the synthesis of a number of cytokines, which mediate in many immunological reactions and, in turn, are prone to rhythmic changes. Antitumor properties of interferon are well studied. Moreover, it is necessary to apply gamma-interferon (They must be selected). They are more efficient.

On the background of lag endocrine function of the thymus there is a significant increase in the seasonal scale of fluctuations in the number of T-suppressors in the blood of patients with precancer. As it is established, not only decrease, but also increase of amplitude of rhythms is connected with weakening of adaptive possibilities of an organism.

Desynchronize of the functional state of the thymus in tumor growth may be caused by the violation of intersystemic relationships of this gland with the functioning of other organs of the endocrine system. Unlike them, the thymus performs not only the endocrine but also the Cytokine function of particular interest are the relationships between the rhythmic functioning of the Thymic-lymphatic system with such components of the circadian system as epiphysis and the adrenal cortex.

The role of dysfunction epiphysis and crust adrenal glands in the endocrine mechanisms inside immune lag with tumors.

The characteristic of healthy people night peak concentration in the blood melatonin decreases with a number of malignant neoplasms. In the initial stages of the tumor process and relatively well differentiated neoplasms, the level of melatonin in the blood and urine (for children need to take urine for research) may not even deviate from the norm.

The development of hypercriticism's in the tumor process is combined with the progression of the disease, recurrence and metastases. The single data of literature testifies to monotony of circadian rhythm of cortisol level in blood cancer.

Patients are shown the monotony of seasonal excretion with urine metabolite hormone-6-oxisulfatmelatonin's.

Immune-Endocrine Relationships in Cancer Patients

There is evidence that one of the mechanisms of onco-static effect of melatonin is associated with its immunomodulating effect, to a large extent Mediated normalization of zinc balance and Thy-mulina level, Activation hemopoez's [6]. According to DP Cardinali and co-authors [7], it is the thymus that is the primary target body for the action of melatonin's. Radiographs and Computed tomography Lungs should be sure to look the thymus area (author's note).

As the tumor process spreads, the manifestations of intersystemic desynchronization are amplified. Activation of the thymus function in the evening (the caption FCA in 9.00 and 21.00 was respectively 4.0 ± 0.6 and 5.6 ± 0.5 ; $p < 0,05$) and $5,3 \pm 0,8$ and $4,8 \pm 0,5$; $p = > 0.05$).

Melatonin is able to directly influence the synthesis and secretion of hormones by the thymus, Epithelial cells which revealed Highly affinity receptors to this hormone.

It is also possible mediated way of influence of epiphysis on endocrine function of thymus through change of functioning of hypothalamic-pituitary-adrenal system. Glucocorticoids in high concentration exert a depressing effect on the endocrine function of the thymus, acting through the receptors in the epithelial component of the organ. In the background of short-time Hypocorticism increases the efficacy of thymus drugs. This is why glucocorticoids do not apply for the treatment of children (Author's note).

In patients the seasonal peak of melatonin concentrations is recorded in the spring, not in winter, which thus exceeds the values of healthy. The rhythm of the FCA caption becomes monotonous, and the number of T-lymphocytes is inverted with the highest values in the spring. This data provides a basis for the assumption about possible acceleration in patients with precancer age changes circannual rhythm of functions of epiphysis, thymus, and also values of immunological indices. To treat it is necessary in spring preparations melatonin (1/4 pills Melaksen's to dissolve in water, reception 15 minutes before sleep).

Prospects of Chronobiologic Research immunoendocrine interactions in oncology are great

Taking into account the biorhythms of the functions of the immune and endocrine systems can be useful in diagnosing, developing prediction criteria and allocating risk factors for the development of malignant neoplasms or recurrences and metastases after the main treatment. It is established that the rhythm of the functioning of epiphysis, thymus, T-cells and the response of the latter to the influence of thymus factors differs from those in healthy people already in precancerous diseases, and the formation of lag the Melatonin formation function of Epiphysis is a leading character. It is necessary to do this screening for children to catch the stage of Preleukemia. That cells began to share-this factor is called ortophosphatiroval (initial stage of cancer), it is necessary in the body to accumulate a certain amount of propylene alcohol, propylene (or Izopropil). At this stage it is necessary to recognize cancer and treat.

Treatment of Acute Myeloid Leukemia

Treatment of acute myeloid leukemia depends on several factors, including the subtype of disease, age of the patient, general health and gender.

In general, treatment is divided into two phases

1. Remission-Induction therapy: The purpose of the first stage of treatment is to destroy leukemia cells in the blood and bone marrow. However, the patient usually needs further treatment to prevent the return of the disease. And it's not necessarily cytostatics.
2. Consolidation therapy: It is also called post-remission therapy, which supports therapy or intensification. This phase of treatment is aimed at destroying the remaining leukemia cells. It is crucial to reduce the risk of re-emergence of myeloid leukosis. And it's not necessarily cytostatics.

New Treatment

Change treatment regimen - gentle chemotherapy regimen, if it is shown. It is impossible to rent pour cytostatics. Only taking into account biorhythms of tumors reproduction - on peripheral blood look (blood test), when progenitor forms more - at what time of day. Suprachiasmatic core plays a big role in protecting the body from education Malignant tumors (Francis Levy, Michael Hastings, 2002). Without "circadian Center" the rate of tumor development is 7 times higher than usual. Epidemiological studies indicate the connection between violations of circadian rhythm and oncological diseases in humans. Daily rhythms are subordinated not only to the endocrine system and internal organs, the vitality of cells in peripheral tissues also goes to a specific circadian program. This area of research is just beginning to develop, but already accumulated interesting data. In the Cells of internal organs, the synthesis of new DNA molecules is predominantly The beginning of the circadian night- In the morning, and cell division actively beg point at the beginning of circadian day - Evening. The intensity of cell growth is cyclical, which is especially important, according to daily rhythms the activity of proteins responsible for cell reproduction, for example topoisomerases II α -protein, which often serves as a "target" of action Chemotherapy drugs. This fact is of paramount importance for the treatment of malignant tumours. Clinical observations show that chemotherapy in the circadian period, corresponding to the peak of Topoisomerases, is much more effective than a single or permanent introduction of chemotherapy in arbitrary time (Author's note).

1. Individualization schemes of treatment taking into account the weak organs of the child (author's diagnosis).
2. No-paracetamol, non-vaccines, vitamins synthetic, Infusions of synthetic glucose and the intake of purified sugar, what is written on the protocols of treatment in the official medicine.
3. More often children die from toxic chemotherapy, from pain - cause of death are the cytostatics themselves. Their admission should be limited.
4. For the prevention and treatment of neutropenia can appoint drugs granulocytic - Filgrastim (Neupogen) and Granulocitara-Microfungal-Lenograstim (GRANOCYT) colony stimulating factors. But in acute myeloblast leukemia these drugs are relatively contraindicated!

Attention! Glucocorticoids to apply for the treatment of cancer patients cannot! Especially in infectious cancer, they cause relapse of tumors, and also with long-term use cause secondary metabolic syndrome!

It is possible and on the usual analysis of blood to see results of treatment that not to torment kids with fences biopsy!

Side effect-hair loss and alopecia, which takes place after the course.

Treatment

Competent Treatment

1. Children shown-juice from fruits mallow.
2. Vesanoid (Tretinoin) - anti-tumor tool - Inducia Remission in acute promyelocytic leukemia (classification by FAB-AML-M3). Vesanoid may be prescribed previously not lechenym patients, patients with relapses or refractor to standard chemotherapy (Daunorubicin and Cytarabine or their analogues).
3. Phyto-and Phyto Chitode - therapy of leukemia in children's age (K.A. Treskunov, 2010) - With the combination of chemotherapy and photochitode therapy in children with acute leukemia, the percentage of total cure can be increased to 90% and more, and significantly reduced the risk of multiple complications, developing, Both in the course of the main disease and as a result of drugs used in chemotherapy in children.

Attention! The strange desire of oncologists-hematologists to protect small patients from the help of medicinal plants, categorical bans act on the parents of these children simply hypnotic. And they refuse any help outside the hematological wards. How many lives could save herbal medicine, used in conjunction with chemistry Chemotherapy and other methods of treatment! After all, these lives irreparable loss for their parents and for all of us! How much suffering could be alleviated! Herbal medicine is necessary in the treatment of leukemia in children. And the earlier start to apply medicinal plants along with chemistry, bone marrow transplant, Gemotransfuzuyami and other methods, the better prognosis and less severe complications in the process of treatment of this severe disease!

1. Chrono-oncology - in tumors there is no rhythm of cell reproduction, but completely do not go out of control neurohumoral regulation of the body. Tumors (spontaneous and induced) - Give Two tops mitoses-morning-afternoon-10-12-16 hours, another-evening-night-20-02-04 hours. Treatment is better to spend-at 8-9 am, another dose-in the evening-18 - 19 hours.

2. To change the scheme of therapy-in 3 months, first-in the evening to appoint Antimitotic medicines, then-in the morning. Then in the afternoon - 13o'clock of the day when the quantity mitoses maximum. It is possible to add a dark phase-at night the tumor does not grow-curtains in the afternoon.
3. Vincristine inhibits the division of normal cells, especially the small intestine, breaks the absorption of nutrients, hence-cachexia. But it is possible to use the drug with small doses to neutralize the appearance of cachexia or to apply herbal medicine.
4. Watches-9, 13, 17-are most vulnerable to patients. At 9am - reduced muscle activity, active stomach, in 13 hours-reduced parameters of the cardiovascular system (CVS), 17 hours-reduced respiratory system. It is necessary to conduct professional rounds during these hours.
5. It is necessary to hear parents of children accompanying, caring because those who more often and more are with the child, knows more experts. And can suggest the right for specialists.
6. The greatest resistance to toxins Onco-viruses-in 18, 23, 03, 05 hours When the liver is active, therefore vincristine at 5am-Optimum for its introduction. But in practice it is not always possible to use it. When the baby sleeps, you cannot wake him. If waking up at 5am, you can apply vincristine, but doses small.
7. The any tumor produces the toxins of the tumor. It's important to remove these toxins. Fitodieta and herbal medicine copes with this.
8. Depakene (Valproic acid) - with ATRA (Vesanoid) can induce apoptosis of leukemia cells [8]. In the instruction there is a contraindication for depacs-it is impossible to apply up to 2 years, but if the benefit exceeds risk, it is possible to apply small doses. I believe that in some clinical cases it is possible. Valproic acid has antitumor effect by proteosomal degradation of gistondeacetilazy. Atra can induce differentiation and apoptosis tumor cells with different variants of acute myeloblast leukemia. Doses effective - trans-Retinoic acid (Atra) - Up to 25 - 30 mg/m² inside daily up to 14 days course of treatment. Depakene - Syrup - for children weighing up to 25 kg - 5-10 mg/kg (150 mg), 2 admissions per day, then increase the dose - every 4 - 7 days. In 6 weeks doses reduce. The general course of treatment is 78 days.
9. Deantiaritmice Score has a positive effect on the mood and psyche of small patients, the effect (in tumors often arrhythmia).
10. Special Diet - mixture from Mallow and cicurina's - mix powder of dried and grated fruits mallow with dried sy-chuzhinoj, taken from the stomach of a young lamb. This mixture is taken with a small amount of water 2 times a day for 1 teaspoon.
11. Attention! 10 art. Spoons of the root Aira Marsh, 500 r Honey. Components to mix, to insist 14 days. Take 1 art. Spoon for 1 hour before eating 3 times a day. To drink tea from a grass oregano at O. Myeloid leukemia.
12. Treatment of infectious complications is carried out by antibiotics of a wide spectrum of action directed against the most frequent pathogens-pseudomonas sticks, an intestinal wand, Staphylococcus aureus. Apply From 1 year - is Sangviritrin. Antibiotic continue for at least 5 days can help Sangviritrin-¼ pills (dissolve in water) 1-2 times a day-10 days strictly 30 minutes after eating.

The main method of treatment hemorrhagic in patients with acute leukemia is transfusion thrombocyte Mass. Simultaneously Pour 200-10000 g/l platelets 1 - 2 times a week. In the absence of platelet mass can be poured with haemostatic purpose fresh whole blood or use direct transfusion. In some cases for cupping bleeding shown the use of heparin (in the presence of intravascular coagulation), epsilon - Amino Capron acid (with elevated fibrinolysis').

Therapy of Acute Promyelocytic Leukemia

Option M, FAB - a special kind of acute myeloleucosis. It is registered in all regions of the world, but in some it significantly prevails. Among all cases of acute myeloblast leukemia in the USA and Europe on acute Promyelocyte leukemia accounts for 10-15%, while in China-about a third, and among the Latin American population-to 46%. The main link of pathogenesis and diagnostic sign of acute promyelocytic leukemia-translocation T (15; 17) (Q22; ql2) with the formation of chimerical gene PML-RAR. In the clinical picture is the leader of coagulopathy (equally probable combustion engine and hyperfibrinolysis), which can be exacerbated against the background of chemotherapy, forming a high mortality rate from hemorrhagic syndrome at the beginning of treatment (20%). Adverse in Factors-Inicial Leukocytosis (the number of leukocytes exceeds 10 x 10⁹/L) and expression CD56 on leukemia Promyelocyte.

For the last 20 years, the prognosis for patients with acute promyelocytic leukemia has changed from "Fatal in high probability" to "recovery in high probability". The greatest contribution to these changes was introduced in the therapy of all-trans-retinoic acid (ATRA). ATRA-Pathognomonic differentiator agent, suppressing transcription of PML-RAR, break the path of Leukemogenesis and initiating ripening atypical Promyelocyte to granulocytes *in vivo* and *in vitro*. The use of ATRA in induction allows to achieve remission in 80-90% of patients with nurtured de novo acute promyelocytic leukemia. ATRA eliminates manifestations of coagulopathy and does not cause aplasia blood, which reduces the likelihood of bleeding and sepsis in the early period of treatment. Standard dose of ATRA 45 mg/(M²Hsut). The possibility of reducing the dose of the drug without changing the effectiveness is shown.

Important! The use of ATRA in induction at the same time as chemotherapy gives a higher non-relapse survival rate than consistent use of drugs. The use of supportive therapy also reduces the likelihood of recurrence, and increased doses of anthracyclines in induction therapy and ATRA in consolidation can improve results of treatment of patients Risk groups.

I offer a gentle scheme for children up to 2 years.

Psychological Factor

Plays a decisive role. The most important thing is love for the child! Abandoned children, unfortunately, go away from unnecessary.

Clowns in clinics are good, but even more important is competent treatment. Children are more likely to die from complications of the disease, and this is an infection. At the same time, official medicine provokes it by vaccines, serums and other xenobiotics. There is a syndrome of increased infection-one infection layered others. It is necessary to prohibit vaccination in children with chromosomal diseases and aberration.

In illnesses and care of children from a life to blame adults, and often doctors themselves that discredits a profession of the doctor in Russia.

Competent Treatment

1. Combating anemia - fruit.
2. Neupogen - 1 injection - It is not always necessary, because there are a lot of leukocyte leukemia, but they do not perform the necessary physiological function in the body. Need a good reason to inject.
3. Interferon is better than gamma, it is more effective.
4. Target Therapy - herbal medicine.
5. Sangvirtrin - at bacteremia with 1 old it is possible to apply - doses carefully to select - strictly in 30 minutes after a meal to give in a drink.
6. Echinacea - herb broth - Strictly without alcohol solutions - with concomitant viral infections.
7. Immunomodulators - Immunogram after vaccination and in case of illness will be almost the same - low level of Ig A and High-Level Ig G.
8. Immunofan - Candles in the rectum, in more severe cases - in/m injections - every other day. Doses to pick up.
9. Diet - Milk with honey (raspberry, lime) - for the Night children - to synchronize melatonin and biorhythms. Important! Immunity should be raised, not reduced, as the official medicine does.

Late Signs of Myeloblast Leukemia

The signs mentioned below indicate that the disease has gone far:

1. A sharp increase in the spleen and liver.
2. Bloating (and increasing it in size), feeling heaviness in the quadrant.

The "myeloid" type testifies to the development of mutated tissues from the myeloid stem cell.

Certain conditions influencing positive prognosis of treatment:

1. Leukemia cells are between 8 and 21 or between 15 and 17 chromosomes;
2. Leukemia cells have an inverse of 16 chromosomes;
3. Cells are not characterized by changes in certain genes.

Prognosis unfavorable Under the following conditions:

1. Part 5 or 7 chromosomes are absent in leukemia cells;
2. Leukemia cells have complex changes affecting many chromosomes;
3. There are changes in the cells at the genetic level;
4. Leukocytes in the blood more at the time of diagnosis;
5. Leukemia does not respond to initial treatment;
6. There is an active blood infection (sepsis).

Prevention

Special attention from the pediatrician deserve:

1. Brothers and Sisters of the patient with leukemia baby;
2. Children with hereditary syndromes;
3. Children who have survived leukemia in the past;
4. Children of people chickenpox leukemia.

Only complex treatment, including traditional and non-traditional medicine, has a positive result.

Fitodieta

1. Cereal with pumpkin is a good option.
2. Green Wheat or wheat sprouts - Blood tests become normal or close to normal, reduce pain in the bones, weakness, lymph nodes are significantly reduced in size.
3. Natural birch juice is useful.
4. The sequence is a natural antibiotic, reduces the amount of eosinophils.
5. Mature the fruits of wild watermelon are used in malignant tumors of the liver, spleen, leukemia and the increase of lymph nodes.
6. Watermelon Honey - a product rich in digestible fructose and glucose, macro-and microelements. Natural sugars can be used.
7. Important! To take synthetic sugar, to do intravenous infusion of glucose categorically it is impossible.
8. Cranberries (Morse).
9. Budra ivy (Grass juice) - cures even metastases. But to apply the pharmacist-phytotherapist because the plant potent can be used-thyme, lungwort, yarrow.
10. Buckwheat, but the fresh grass of buckwheat should not be applied, as flowers and leaves of a plant in fresh kind are poisonous. After drying they lose their poisonous properties.
11. Poplar Black - Kidney broth.
12. Ordinary Gear -The elevated part of the tooth is one of the most important components in the treatment of blood diseases. The plant has antipyretic, anti-inflammatory, wound, choleric sedative, anticonvulsant, tonic effect.
13. Blueberry Swamp.
14. Cedar Siberian. Water infusion, broth, tincture from cedar nut: apply at diseases of blood, especially at leukemia. Cedar seeds for children are a good alternative.

15. Cranberry Fruit.
16. Highlander Multiflowering- Stimulator of the lake and erythropoiesis.
17. Infusion of blueberry leaves - oBladajut antitumor Action, they prevent and treat oncology.
18. Flax seeds-broth from these seeds can deduce radionuclides, toxins and chemical substances after a course of chemotherapy, irradiation.
19. Powder from dried mallow forest and its rastolchennyh fruit to mix with dried sheep cheese leaven. Drink with a small amount of water 1 teaspoon twice a day.
20. Juice of fruits mallow forest - to drink inside.
21. Wild Strawberry (berries and leaves)-reception in acute and chronic leukemia. 22. Chestnut Horse (Flowers).
22. St. John's Wort - according to the indications. It is not always possible to use, there are cases of interaction with other drugs. If you take one herb, it stops completely the process of spreading malignant cells in leukemia and other diseases of the blood system.
23. Rosehip may (fruits).

When Leukocitoza and radiation:

1. Rhodiola Pink - Root Extract - morning and afternoon reception.
2. Horsetail field (grass).
3. Mordovnika seeds are used to treat the effects of chronic radiation lesions.
4. Propolis-should be taken at 1/2 hours a few times a day before meals. The tool should chew as long as possible, then do not spit, and swallow.
5. Oregano ordinary contains essential oils, tanning substances, vitamins. This plant should be taken with caution, starting with a small amount. Oregano relieves the symptoms of leukemia, and is a means of soothing the nerves and restoring sleep.
6. Flower pollen is a unique mixture of nutrients, vitamins and trace elements. In diseases of blood flower pollen mixed with honey in the ratio of 2:1, insist three days. Take the remedy you need one teaspoon, you can drink milk. This phytopreparation restores the affected blood cells, stimulates immunity.

7. Sabelnik - Herb broth – leveling inflammation in the blood.
8. Saskatoon - Replenishes The vitamin and microelementa composition of blood.

Conclusion

Thus, the stage of preleukemia can be grasped without acute pathology. This is very important.

1. In the evening, the values of the indicators are changed compared to the healthy that indicate a violation of the amplitude of their daily rhythm's, for objectification evaluation of immune function and endocrine systems of patients oncological profile, which allows to detect the presence of violations, it is expedient to study their circadian rhythm (at least in the morning and evening), and not only fixing the morning values of the indicator.
2. Secondly, the assessment of the direction of the influence of immunomodulatory funds on the functions of the immune system of cancer patients should be carried out taking into account the season. At the same time it is necessary to take into account the possibility of the distortion of seasonal reaction of lymphocytes on their influence in separate seasons of the year.
3. Third, the accounting of circadian and circannual rhythms proliferative activity of lymphoid and marrow cells, and therefore their sensitivity to damaging action of chemotherapy, radiation and therapy, will allow to individualize modes last.
4. As pharmacological means, rehabilitating at a tumor process not only functions of the immune system (preparations of thymic origin, but also their disturbed rhythms, factors of epiphysis can be used. The latter change the phase and/or amplitude of rhythms, regulate the cyclicity of expression receptors to hormones on lymphocytes, realize their synchronizer effect on the immune system through its central organ thymus, interacting with the crust of the adrenal glands. Drugs with such a mechanism of action should be both melatonin and epifizar peptides (Epitalamin, Epitalon), which increase the content of melatonin in the body [9], so as synchronisation drugs epiphysis can be used alone or in combination with the methods of treatment of patients cancer profile, which not only lead to further depletion of the endocrine function of the thymus and disturbances of the peripheral link of the immune system, but also contribute to the appearance or strengthening of lag functions of the immune and endocrine systems.
5. Epifizar preparations can also be useful in oncological practice at application in combination with preparations of thymic origin in adjuvant mode at carrying out of relapse courses. For maximum efficiency such immunotherapy is advisable to spend in the evening hours, courses (preferably twice a year), with an assessment of the direction of its influence, taking into account the time of year.
6. In cancerous tumors occurs anaerobic glycolysis (O. Warburg, 1923), as in diabetes mellitus. The goes breakage in the second reaction of the Krebs cycle. The process of breathing in the cancer cell is broken. If you use early signs of leukemia, carry out early screening of the disease, you can apply antioxidants therapy at the stage of the pre-leukemia process. Further, when cancer is already obtained from precancers, vitamins and antioxidants are contraindicated. Meanwhile, they are part of all the protocols of official medicine, which is fraught with the death of children. And doctors do it. It is necessary to educate doctors and parents of children to prevent the development of cancer, because cancer cells of vitamins build their walls. For 2 - 3 months "burn down" children, whom stuffed doctors vitamins During this period.
7. All cancer cells and tumors are similar to each other - they are of white color. The author personally saw it at autopsies in anatomic and in morgues. It's like thrush or fungus (Tullio Simoncini, 1983). Thus children under 2 years receive in Russia 16 vaccines (36 vaccinations). In this case, the immunity of children is only formed and any impact on it is fraught with breakage.
8. The simplest remedy for fungi is a solution of baking soda. The author tried Antifungal treatment in women with thrush Brown (tetraborate sodium). It is a simple means of cures fungi that cause oral contraceptives and HRT (Hormone replacement therapy), when as fungicide drugs only for a while delay the growth of fungi (2008).
9. Cancer cells contain a biomarker - an enzyme CYP1B1. It changes Salvestrol and is found in many fruits and vegetables, but only in fruits (strawberries, blueberries, blackberries, raspberries, grapes, Saskatoon, black and red currants, cranberries, apples, peaches, green vegetables (broccoli, other varieties of cabbage), artichokes, red and Yellow pepper, avocado, asparagus, eggplant. If you eat these products processed by chemical fungicides, the enzyme is blocked Cyp1B1 and there is no recovery. It is the protection of plants from fungi. When transforming the Salvestrol result, a component killing cancer is formed.

10. The complaint of Mathias Rata to the International Criminal Court on June 14, 2003 gave thea Understand that pharmaceutical corporations benefit from diseases rather than their healing. But, if you look at who in these corporations works, it's doctors, non-pharmacists. And they are the doctors who manage these corporations.
 11. Another scheme-epigenetic preparations (valproic and completely trans-retinoic Acid). Nemirovchenko V [8] - helps to cure children.
 12. For young children it is not necessary to determine the parameters of immunity, since up to 3 years is its formation. Immunofan in candles can and should be appointed in the stage of Preleukemia, leukemia and Neuroleukosis.
 13. To abolish any vaccination for solar children, otherwise, there is a syndrome of increased infection and children can die from superbugs and from systemic candidiasis.
 14. It was in children under one year the combination of epigenetic and chemotherapy allowed to reliably increase survival. Most likely drugs with epigenetic effect in young children contribute to differentiation progenitor cells and make them more sensitive to antitumor.
 15. Fungal infections reveal a tendency to increase. It is necessary to eat fruits of fruit where there are no chemical additives and fungicides - during remission.
 16. No natural or synthetic vitamins can be taken at the time of sickness! This is a dangerous mistake. You cannot use glucose infusions. In the body of children it utilized. It is possible to apply-only natural sugars-honey, fruit.
 17. The treatment of acute lymphoblastic leukemia toxic effect is less pronounced when introducing asparaginase after Prednisolone's and Vikristin's than when using it before or during the application of these cytostatics. The pre-use of methotrexate and Citarabin enhances the effect of Asparaginase's. If L Asparaginase's is introduced first, its effect may be weakened by the subsequent introduction of Methotrexate and Citara bins.
 18. Doctors do not know and that there are in the arsenal of means-the stimulants of a bone marrow on synthesis of platelets-sesame (seeds) and milk thistle (seeds) which can be used, how to prevent Thrombocytopenia's, and for treatment in children.
 19. Vitamin A increases the synthesis of lymphocytes, sometimes do not immunomodulators. This can be used in the treatment of small children.
 20. To increase the number of leukocytes of all kinds can simple-broth of oats-a means, how to raise leukocytes in blood quickly, in a week the positive dynamics will be visible. About 2 teaspoons of oats (unpeeled) and fill it with two glasses of water. Simmer for about 15 minutes, then drain and take for a month to 1/3 glasses three times a day.
 21. Children need zinc after chemotherapy - turkey, Saskatoon (Morsi).
 22. Stimulators Eritropoez - elderberry syrup, pomegranate juice, red beet juice (juices neEd use to dilute required). There is an almost unknown drug-gouna-zebrafish (extract of embryonic tissues spawning fish)-5 drops twice a day-a course-1 month. Of course, you can also use fresh fish caviar.
 23. Treatment of leukemia is a very complex, long and costly process. First, the course of 64 days is called remission. Further during the remission is appointed supportive therapy, which can last up to 104 weeks.
 24. Traditional treatment with the use of chemical agents, radiation therapy should be combined with non-traditional treatment methods. Then the efficacy of treatment and cure increases.
 25. Folk remedies only help to strengthen immunity, which is important in the treatment of any form of leukemia.
 26. In order to avoid provocation of relapse children are not recommended physiotherapy treatment, change of climatic conditions.
 27. Detoxication Therapy of endotoxins tumors - need. Children often die from the intoxication of the tumor decay of its metastases. Only helps is Phytotherapy.
 28. In some cases, only the use of St. John's Wort helps to cure the disease.
 29. It is necessary to apply all different treatment even with the same diagnosis. It is very important to have for each personalized treatment.
- Someone N.N. Blokhin-former director of the Research Institute of Oncology in Russia destroyed in the 60s of the 20th century cure for the treatment of all forms of cancer for the fact, the authors healers the did not give him primacy. Now her name is named Cancer Center in Moscow. In Russia, much is really absurd, but nobody wants to change anything [10-42].

Someone kills children, and someone saves. The fate of our children depends on which side you will stand.

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