

CHRONOPHARMACOLOGICAL ASPECTS OF BLOOD DISEASE THERAPY

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High frequency and risk of diseases of the blood determines the interest in a review and optimization of the existing schemes of treating diseases of the blood system and the development of drug chronoschemes considering people organisms' sensitivity to its action.

Found that in the morning preparations of iron are poorly absorbed and the amplitude of its content in the blood increases. Iron is better absorbed and assimilated in the evening hours: 21-24 h. At this time it's concentration in the blood by 16-30% lower than at 8-12 h. Iron, which is absorbed in the first half of the day, poorly utilized and promotes side effects. Therefore the preparations of iron used to treat iron deficiency anemia should be prescribed only in the second half of the day.

The chronotherapy of patients with rheumatic heart disease should be performed with heparin at 20 h (5000 units) and at 24 h (10,000 units), with curantylum once at 20 h (150 mg), and with fraxiparin - once at 16 h. This chronostrategy allows to achieve reliable clinical effect and the positive blood coagulation dynamics earlier than the traditionally therapy. Using of smaller daily and course doses halved the risk of side effects.

The chronotherapy with acetylsalicylic acid (ASA) of patients with diabetes should be held once a day at 22 h in a dose of 125 mg. This chronoscheme improves anticoagulative and inhibits coagulative activity of the blood. Also, taking aspirin during the second half of the day decrease the risk of gastric bleeding on 40%. Thus ASA should be administered as a preventive measure once in the second half of the day. This chronoscheme of ASA used at patients with diabetes decreases the incidence of myocardial infarction for 40% and also decreases the risk of myocardial infarction at the morning for 55%. The chronotherapy of patients with diabetic nephropathy with signs of disseminated intravascular coagulation with trental should be performed at 22-23 h in a dose of 150 mg, which helps to normalize chronostructure of circadian rhythm of hemostasis.

Based on the foregoing information it is worth paying attention to the necessity of developing new chronoschemes of blood diseases treatment in order to improve its effectiveness and safety.