MAXITON – T
Instructions
on medical use of the drug

Trade name: Maxiton – T.
International nonproprietary name: DL -alpha-tocopherol acetate, Dexpanthenol , Nicotinamide, Pyridoxine hydrochloride, Retinol, Riboflavin, Thiamine hydrochloride, Cyanocobalamin, Ergocalciferol.
Dosage form: Concentrate for the preparation of solution for infusion.
Pharmaco-therapeutic group: Vitamins.
Composition: *10 ml of solution contains:*
Active substances: pyridoxine hydrochloride 25 mg, tiamine hydrochloride 80 mg, cyanocobalamin 0.800 mg, retinol palmitat 15000 IU, riboflavin 10 mg, nicotinol 125 mg, diespanthenol 30 mg, ergocalciferol 1000 IU, dl - alpha -thicopoferol Acetate 10 mg;
Excipients: benzyl alcohol, ethanolamide gentisic acid, polysorbate 80, water for injection.
ATX code: A11BA.
Pharmacological properties:
Pharmacodynamics:
The drug Maxiton - T is an excellent combination of fat-soluble and water-soluble vitamins in an aqueous solution. The drug demonstrates a higher pharmacological effect than taking these vitamins separately. Neurotropic B vitamins have a beneficial effect on inflammatory and degenerative diseases of the nervous system and musculoskeletal system; in high doses they have analgesic properties, increase blood flow and normalize the functioning of the nervous system and the process of hematopoiesis. This complex of vitamins has a catalytic effect on carbohydrate metabolism and is necessary for the normal functioning of the central nervous system, thyroid gland, liver, hematopoietic organs, and gastrointestinal tract.
Vitamin B 1 (thiamine hydrochloride) in the human body, as a result of phosphorylation processes, is converted into cocarboxylase, which is a coenzyme of many enzymatic reactions. Vitamin B1 affects the conduction of nerve impulses at synapses.
Vitamin B 6 (pyridoxine) plays an important role in metabolism and is necessary for the normal functioning of the central nervous system and peripheral nervous system.
Vitamin B12 (cyanocobalamin) is involved in the processes of transmethylation, hydrogen transfer, formation of methionine, nucleic acids, choline, creatine. Vitamin B12 has a beneficial effect on the function of the nervous system, improves brain function, and is involved in the formation of the enzyme necessary for the production of lipoprotein in myelin tissue.
Retinol palmitate replenishes vitamin A deficiency. Due to the large number of unsaturated bonds, it activates redox processes, stimulates the synthesis of purine and pyrimidine bases, participates in the energy supply of metabolism, creating favorable conditions for ATP synthesis. Increases protein synthesis in cartilage and bone tissue, which determines the growth of bones and cartilage. Stimulates epithelization and prevents excessive keratinization of the epithelium (hyperkeratosis). Regulates the normal function of squamous epithelium, which plays a barrier role, and increases the body's resistance to infection. Strengthens the formation of antibodies and activates phagocytosis.
Vitamin B2 (riboflavin) acts in the body as a coenzyme in the form of flavin adenine dinucleotide and flavin mononucleotide, which play an important role in the metabolism of tissues of the respiratory system. A lack of B vitamins leads to a decrease in the body's resistance to infections.
Nicotinamide used by the body as a source of niacin. This essential vitamin plays an important role in lipid metabolism, respiratory system tissues and glycogenolysis.
Vitamin E (dl -α-tocopherol acetate) has antioxidant properties, protects cell components from oxidation and prevents the formation of toxic oxidation products, preserves the integrity of erythrocyte membranes and protects them from hemolysis.
Vitamin D (ergocalciferol) is a fat-soluble vitamin. Regulates the exchange of calcium and phosphorus in the body. Its active metabolites easily penetrate cell membranes and bind to special receptors in the cells of target organs, which helps activate the synthesis of calcium-binding proteins, facilitate the absorption of calcium and phosphorus, as well as increase uptake by bone tissue and prevent their resorption from bone tissue.
Dexpanthenol it is an analogue of D-pantothenic acid, which is a component of the coenzyme acetyl- CoA, which plays an important role in the metabolism of all cells. It has a pronounced effect on the formation and function of epithelial tissue and has some anti-inflammatory activity.
Directions for use: *As part of complex therapy:*

- Before and after operations (to prepare for surgery and improve the regeneration of soft tissues and nerve endings);
- For diseases of the gastrointestinal tract (cholecystitis, pancreatitis, ulcerative colitis, enteritis, gastritis, gastric ulcer) to restore and regenerate the damaged mucous membrane of the gastrointestinal tract, as well as to maintain normal secretory and kinetic function of the intestine;
- Hepatitis, liver cirrhosis;
- Polyneuritis, neuralgia, diabetic polyneuropathy;
- Various fractures and osteoarticular pathology, to improve phosphorus-calcium metabolism (for the regeneration of soft tissues and nerve endings after extensive injuries);
- Anemia (to enhance hematopoiesis);
- Asthenic syndrome, chronic fatigue syndrome;
- Recovery period after infectious diseases;
- Long-term use of contraceptive drugs;
- Chronic hypo- and vitamin deficiency or increased need for vitamins (with hyperthyroidism, alcoholism, intoxication, malnutrition, diet);
- X chronic non-healing wounds;
- Male and female infertility, to improve spermatogenesis and egg maturation;
- Patients on dialysis;
- Skin diseases accompanied by dryness, impaired trophism and hyperkeratosis (psoriasis, vitiligo, trophic ulcers, eczema, lichen, etc.), hair loss;
- In geriatrics, elderly patients as a drug of choice.

Directions for use: *For intravenous infusions only !* The daily dose administered depends on the patient's age:
from 3 to 6 years, 2 ml of the drug diluted in 100 ml of 0.9% sodium chloride solution or 5% dextrose solution;
from 6 to 12 years, 5 ml of the drug diluted in 250 ml of 0.9% sodium chloride solution or 5% dextrose solution;
from 12 to 16 years, 10 ml of the drug diluted in 500 ml of 0.9% sodium chloride solution or 5% dextrose solution;
from 16 years and older 10 ml – 20 ml of the drug diluted in at least 500 ml of 0.9% sodium chloride solution or 5% dextrose solution.
The duration of the infusion should be at least 30 minutes. The duration of treatment depends on the assessment of the patient's clinical status. The recommended course of treatment is carried out for two weeks. If necessary, the course of treatment can be extended for a period of no more than three weeks.

Side effects:
No side effects have been reported when the recommended dosage is followed. There is a risk of allergic reactions in persons sensitive to B complex vitamins, which are reversible after stopping the drug.

Contraindications:
- hypersensitivity to individual components of the drug;
- decompensated heart failure, severe cardiac conduction disorders;
- hypervitaminosis of one of the vitamins contained in the drug;
- dexpanthenol contraindicated in patients with hemophilia and ileal obstruction caused by mechanical obstruction;
- children under 3 years of age.

Drug interactions:
Isoniazid, cycloserine, penicillamine, hydralazine and anticoagulants increase the body's need for vitamin B6. Levodopa reduces the effect of therapeutic doses of vitamin B6. Vitamin B 6 reduces the therapeutic effect of phenobarbital and phenytoin by 50%. Vitamin B1 is compatible with redox substances and is unstable in neutral and alkaline solutions (i.e. carbonates, citric acid, barbiturates, erythromycin lactobionate IV). Solutions containing hyposulfate salts are incompatible with thiamine. Nicotinamide enhances the effect of antihypertensive drugs and is an isoniazid agonist.

Special instructions:
Not specified.

Overdose:
Symptoms: possible intensification of the manifestations described in the "Side Effects" section. When consuming large doses, there is a possibility of hypervitaminosis of vitamins A and D, symptoms of sensory neuropathy, and ataxia.

Treatment: symptomatic therapy.

Release form and packaging:

Concentrate for the preparation of a solution for infusion in a glass ampoule of 10 ml. The ampoule is packaged in a plastic cell and placed in an individual cardboard box.

Storage conditions

Store at temperatures below 25 °C, protected from light.

Keep out of the reach of children!

Shelf life

18 months.

Do not use after expiration date.

Conditions for dispensing from pharmacies

By doctor's prescription.

Made for:
MAXX PHARM LTD.
London, Great Britain