Elcar (L-Carnitine injections) instructions

translated from original Russian instructions by Extrapharmacy Online Store
http://extrapharmacy.ru

Active substance: Levocarnitinum (L-Carnitine)

Pharmacologic action
L-Carnitine is a natural compound, similar to a group B vitamins. It takes a part in metabolism processes as a transport form of long chain fatty acids (palmitic acid and other) from the cytoplasm to mitochondrions, where these acids are beta-oxidated with adenosine triphosphate acid and acetyl-CoA formation. It improves a protein and lipid metabolism, increases a secretion and enzymatic activity of gastric and intestinal secrets, improves a food digestion, decreases an excess of a body weight and decreases a fat content in muscles. It increases a tolerability to physical loads, suppresses a cetoadids formation and an anaerobic glycolysis, decreases a lactic acid acidosis degree, promotes a more effective glycogen use and increases its content in liver and muscles.

L-carnitine has an anabolic and lypolytic action; normalizes an increased basic metabolism (in a case of the hyperthyreosis), is a peripheral (non-direct) antagonist of thyroid hormones, but not a direct inhibitor of a thyroid gland function. It improves a metabolism and energy supply in tissues.

Pharmacokinetics
After the intravenous injection the L-Carnitine is almost totally removed from blood after 3 hours. L-Carnitine easily goes into liver and myocardium, more slowly – into muscles. Is excreted by kidneys, mostly as acyl ethers. (more than 80 % per 24 hours).

Indications
L-Carnitine is used as a component of the complex therapy of acute hypoxia states (acute brain hypoxia, ischemic cerebral attack, transitory ischemic attack). L-carnitine is used in acute, subacute and rehabilitation periods of brain circulation disturbances. It is also used for the treatment of a dyscirculatory encephalopathy and different traumatic and toxic injuries of brain, in a rehabilitation period after surgical invasions. Elcar is indicated for the treatment of a primary and secondary carnitine deficiency, including patients with a chronic renal insufficiency, treated with a hemodialysis; for treatment a cardiomyopathy, ischemic heart disease (angina pectoris, acute myocardial infarction, post-infarction states), hypo-perfusion due to a cardiogenic shock and other metabolism disturbances in myocardium.

Contraindications
Individual intolerability, pregnancy, lactation (there are no data about possibility and safety of the drug use in these states).

Side effects
Allergic reactions are possible, miasthenia (in patients with an uremia). If the druf is injected too quickly (80 drops per minute and more) a pain along a vein is possible; pain disappears after the decrease of the injection rate.

Interaction
Glucocorticoids promote an accumulation of the drug in tissues (except the liver), other anabolic medicines potentate its effect.

Dosing and Administration
1 ampule contains 0,5 g of L-carnitine

Elcar is injected intravenously slowly by drops or by stream (2-3 minutes) or intramuscularly. Before the i/v injection an ampule contents is dissolved in 100-200 ml of a solvent (0,9 % solution of sodium chloride or 5 % solution of dextrose (glucose)).
For the treatment of acute cerebral circulation affections 1 g per day (2 ampules) is used during 3 days, than 0,5 g/day (1 ampule) during 7 days. After 10-12 days repeated courses are possible (repeated course duration 3-5 days).
For treatment in sub-acute and rehabilitation periods, dyscirculatory encephalopathy and different diseases of brain, carnitine deficiency an Elcar solution is injected 0,5-1 g/day (1-2 ampules) intravenously (by drops or by stream) or i/m (2-3 times a day) without a dissolving during 3-7 days. If it is necessary, a repeated treatment is used after 12-14 days.

An intravenous slow injection (2-3 minutes) is used for the treatment of the secondary carnitine deficiency due to a hemodialysis - 2 g (4 ampules) fo 1 time (after the procedure); for treatment of an acute myocardial infarction, acute cardiac insufficiency - 3-5 g/day (6-10 ampules), divided into 2-3 steps during first 2-3 days, than dose is decreased by half; for the treatment a cardiogenic shock - 3-5 g/day (6-10 ampules), divided into 2-3 steps until a patient's exit from the shock state. After it an oral administration of Elcar is used.

**Manufacturer**
PIQ Pharma (Russia)

**Reliable supplier**
Extrapharmacy Online Store
http://extrapharmacy.ru

**Storage**
Keep in protected from direct light place at temperature 15-25 °C.
Shelf-life of the drug is 3 years.

Keep out of the reach of children.