HOSPIMAX
Maximising Life

Nefmax®-MV Injection

Methylcobalamin 1500 mcg,
Pyridoxine Hcl 100 mcg, Niacinamide 100 mcg Injection

Restore depletion of Multivitamins

NEFMAX-MV Injection

Product Description

Each 2 ml Contains: -

- Methylcobalamin 1500 mcg
- Pyridoxine Hcl 100 mcg
- Niacinamide 100 mcg

General Information

Multi-vitamins Injection specifically designed to suit the nutritional needs of patients of kidney disease and/or on dialysis treatment. The need of the injection arises just after a dialysis procedure is done to a patient. The need of medication is so as to correct or fulfill the immediate requirement of vitamins in the body that will lose during a dialysis.

Multivitamin injections have developed considering a very special need and to avoid deficiency of vital nutrients.

In patients with kidney failure, heart attacks occur 5–10 times more than in the general population. More than 90% of dialysis patients have high homocysteine

levels. By taking adequate amounts of vitamins B12 and B6, the risk for heart disease may decrease by 20%–55%.

Pharmacology

Multivitamin Injection is a combination of Vitamins endowed with a particular hepato-protective activity in an optimal ratio so as to attain maximum therapeutic synergy. It also acts at a level of bone marrow to stimulate erythropoiesis. Methylcobalamin has a complex biological activity and takes part in protein synthesis particularly in neuronal and hepatic tissues. Depending on the level and type of Anemia, injection is indicated for the following conditions:

– Mild Anaemia
– Moderate Anaemia
– Post blood profusion maintenance of hemoglobin
– Chronic or Severe anaemia

Role of Multivitamin Injection in Dialysis Patient

Methylcobalamin in Dialysis

Methylcobalamin is a form of vitamin B12. Vitamin B12 is important for the brain and nerves, and for the production of red blood cells.Methylcobalamin is used to treat vitamin B12 deficiency. Methylcobalamin is sometimes used in people with pernicious anemia, diabetes, and other conditions.

Patients withCKD receiving haemodialysis respond favourablyand quickly when supplemented with B12, evenwhen the plasma values indicate normal ranges. This may be related to the fact that plasma B12 isnot a sensitive indicator of B12 status. Methylmalonic acid and homocysteine are more sensitiveindicators of B12 status. Additionally, B12 is foundin high protein foods. Thus, patients who consume low amounts or remain on very low-protein diets for extended period, for example.3 years, with no B12 supplementation, mayhave insufficient B12 levels. Currently, the dataon B12 are limited and what is available does notindicate that patients with CKD are routinelydeficient. However, it is prudent to have patientson low (0.6 g/day) or very low (0.3 g/day) proteindiets receive a supplement with the DRI for B12.

Neuropathy is found in 65% of patients on or nearing dialysis when GFR falls below 10%. Uremic neuropathy is an important cause of morbidity among patients undergoing chronic haemodialysis. Methylcobalamin is a safe and potentially beneficial therapy for neuropathy in Chronic HD patients

Niacinamide in Dialysis

Niacinamide is the amide of nicotinic acid (vitamin B3/niacin) that can also be synthesized from the amino acid tryptophan.
Higher niacinamide doses improve lipid profile by increasing serum HDL and reducing LDL cholesterol fraction and serum triglycerides.There is a growing

interest on the efficacy of niacinamide for the treatment of hyperphosphatemia not as a phosphate binder, but rather as a direct inhibitor of the Na– Pi–2b sodium-dependent transporter in the gastrointestinal tract.

Pyridoxine in Dialysis

Pyridoxine (B6) is a family of compounds that, unlike other water-soluble vitamins, can be stored in muscles. It is important for the metabolism of amino acids and fatty acids and influences cognitive development, immune function as well as steroid synthesis.
In dialysis patients, pyridoxine supplementation may significantly correct the high levels of total cholesterol, triglyceride, and LDL and the low HDL.
This daily dose of pyridoxine should be higher in haemodialysis patients as they present increased erythropoietin activity associated with the use of erythropoietin and there are some drugs and other substances that interfere with pyridoxine metabolism. In a study on anaemic dialysis patients, the addition of pyridoxine in the conventional iron treatment has led to a more solid and sustainable correction of haemoglobin levels

Indication

- Vitamin B12 Deficiency
- Anemia
- Hyperhomocysteinemia
- Uremic Neuropathy
- Liver Disorders
- Megaloblastic Anemia
- Pre & Post Surgery
- In all ages – Infections, General Debility, Weakness

Dosage

IM (Intramuscular)

- Post-Dialysis: One ampoule after each dialysis followed by tab once daily (except on the day of dialysis)
- Mild Anemia: Once/Twice a week
- Severe Anemia: Alternate days till the Hb improves
- Routine Antenatal Care: Once a week, stop if Hb is > 13 g/dl and recommence if Hb < 11 g/dl

IV (Intravenous)

Dosage same as for intramuscular but should be mixed with 500 ml of infusion and given over 2 hours

Storage

Store Injection in a cool and dry place. Protect from light and moisture.