vitamin B complex with vitamin C

Oral

Parenteral
Key Plex, Neurodep, Vitamin C

Classification
Therapeutic: vitamins
Pharmacologic: water soluble vitamins

Pregnancy Category UK

Indications
Treatment and prevention of vitamin deficiencies.

Action
Contains most or all of the B-complex vitamins (B1, B2, B3, B5, B6, B12) and vitamin C, a diverse group of compounds necessary for normal growth and development that act as coenzymes or catalysts in numerous metabolic processes. Therapeutic Effects: Replacement of vitamins in patients who are deficient or at risk for deficiency.

Pharmacokinetics
Absorption: Well absorbed after oral administration. Some absorptive processes require cofactors (B12).
Distribution: Widely distributed; cross the placenta and enter breast milk.
Metabolism and Excretion: Used in various biologic processes. Excess amounts are excreted unchanged by the kidneys.
Half-life: Unknown.

Contraindications/Precautions
Contraindicated in: Hypersensitivity to ingredients in preparations (benzyl alcohol, parabens, bisulfites, tartrazine).
Use Cautiously in: Undiagnosed anemias.

Adverse Reactions/Side Effects
In recommended doses, adverse reactions are extremely rare. GU: bright-yellow urine. Misc: anaphylaxis (vitamin B1-thiamine), allergic reactions to preservatives.

Interactions
Drug-Drug: Large amounts of vitamin B6 may interfere with the beneficial effect of levodopa.

Route/Dosage
PO, IV (Adults and Children): Amount sufficient to meet RDA for age group.

NURSING IMPLICATIONS
Assessment
● Assess patient for signs of vitamin deficiency before and periodically during therapy. Assess nutritional status through 24-hr diet recall. Determine frequency of consumption of vitamin-rich foods. Therapy is limited to periods of high physiologic stress when patient is not able to ingest adequate vitamins orally.

Potential Nursing Diagnoses
Imbalanced nutrition: less than body requirements (Indications)

Implementation

TIME/ACTION PROFILE
ROUTE ONSET PEAK DURATION
PO unknown unknown unknown

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4 Administration
● Continuous infusion. Usually administered as part of a large volume parenteral admixture.

Therapeutic Effects: Replacement of vitamins in patients who are deficient or at risk for deficiency.
Y-Site Compatibility: aminophylline, ampicillin, atropine, betamethasone, calcium gluconate, cefazolin, chlorpromazine, clindamycin, cyanocobalamin, dexamethasone, diphenhydramine, dopamine, droperidol, edrophonium, epinephrine, esmolol, fentanyl, furosemide, gentamicin, hydrocortisone, insulin, isoproterenol, lidocaine, magnesium sulfate, methoxamine, minocycline, morphine, norepinephrine, oxacillin, penicillin G, phenytin, pyridostigmine, theophylline, trimetaphan.

Y-Site Incompatibility: diazepam, phenytoin.

Patient/Family Teaching
- Encourage patient to comply with diet recommendations of health care professional. Explain that the best source of vitamins is a well-balanced diet with foods from the four basic food groups.

Evaluation/Desired Outcomes
- Prevention of or decrease in the symptoms of vitamin deficiencies.

Why was this drug prescribed for your patient?