Versia®

Neostigmine Methyl Sulphate USP

COMPOSITION
Versia® IM/IV Injection: Each ml contains Neostigmine Methyl Sulphate USP 0.5 mg.

PHARMACOLOGY
Versia® (Neostigmine) is a parasympathomimetic, specifically, a reversible cholinesterase inhibitor. By interfering with the breakdown of acetylcholine, Neostigmine indirectly stimulates both nicotinic and muscarinic receptors. It does cross the blood-brain barrier but only poorly. Neostigmine binds to the anionic site of cholinesterase. The drug blocks the active site of acetylcholinesterase; so the enzyme can no longer break down the acetylcholine molecules before they reach the postsynaptic membrane receptors. This allows for the threshold to be reached so a new impulse can be triggered in the next neuron. In myasthenia gravis there are too few acetylcholine receptors. So with the acetylcholinesterase blocked, acetylcholine can bind to the few receptors and trigger a muscular contraction.

INDICATION
Versia® Injection is indicated for -
- Reversal of nondepolarising neuromuscular blockade for surgical anesthetic procedures
- The prevention and treatment of post-operative abdominal distention and urinary r etention after mechanical obstruction has been excluded.
- Treatment of the systemic control of Myasthenia Gravis when oral therapy is impractical.

DOSAGE & ADMINISTRATION
Adults:
Reversal of the effects of Non-depolarizing Neurormuscular Blocking Agents: The usual dose is 0.5 to 2 mg given by slow intravenous injection over 60 seconds; repeated as required. Total dose should not exceed 5 mg (in exceptional cases). When Neostigmine is administered intravenously, it is recommended that Atropine Sulphate (0.6-1.2 mg) also be given intravenously using separate syringe.

Prevention of post-operative abdominal distention and urinary retention: 0.25 mg intramuscularly or subcutaneously as soon as possible after operation; repeat every 4-6 hours for 2-3 days.

Treatment of post-operative abdominal distention: 0.5 mg intramuscularly or subcutaneously or as required.

Treatment of urinary retention: 0.5 mg intramuscularly or subcutaneously. If urination does not occur within an hour, the patient should be catheterized. After the patient has voided, or the bladder has been emptied, continue the 0.5 mg injection every 3 hours, for at least 5 injections.

Symptomatic control of Myasthenia Gravis: 0.5 mg intramuscularly or subcutaneously. Subsequent dose should be based on the individual patient's response.

Neonates: 50-250 micrograms (0.1 to 0.5 ml) every 4 hours.

Children: 200-500 micrograms (0.4 ml to 1 ml) as recommended.

SIDE EFFECT
Nausea, vomiting, increased salivation, diarrhoea and abdominal cramps (more marked with high doses). Signs of overdose are increased gastrointestinal discomfort, bronchial secretions and sweating, involuntary defecation and micturition, miosis, nystagmus, bradycardia, hypotension, agitation, excessive dreaming and weakness eventually leading to fasciculation and paralysis.

PRECAUTION
Asthma, bradycardia, recent myocardial infarction, epilepsy, hypotension, parkinsonism, vagotonia, peptic ulceration. Atropine or other antidote to muscarinic effccts may be necessary (particularly when Neostigmine is given by injection), but it should not be given routinely as it may mask signs of overdose.

CONTRAINDICATION
Neostigmine is contraindicated in patients with known hypersensitivity to the drug. It is also contraindicated in patients with peritonitis or mechanical obstruction of the intestinal or urinary tract.

DRUG INTERACTION
Anti-arrhythmic Procainamide, Quinidine and possibly Propafenone antagonise effect of Neostigmine. Antibacterials, Aminoglycosides, Clindamycin, Lincomycin and Polymyxins antagonise effect of Neostigmine.

USE IN PREGNANCY AND LACTATION
Pregnancy category C. But use during lactation hasn't been determined.

STORAGE CONDITION
Store in a cool and dry place, protected from light.

HOW SUPPLIED
Versia® IM/IV Injection: Each box contains 10 ampoules in blister pack.

Manufactured by :

SQUARE
PHARMACEUTICALS LTD.
BANGLADESH

® Registered Trade Mark.

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