Cleodin

Clindamycin Capsule/Injection

Presentation
Cleodin 150 Capsule: Each capsule contains Clindamycin 150 mg (as Clindamycin Hydrochloride USP).
Cleodin 300 Capsule: Each capsule contains Clindamycin 300 mg (as Clindamycin Hydrochloride USP).
Cleodin 300 IM/IV Injection: Each ampoule contains 2 ml sterile solution of Clindamycin 300 mg (as Clindamycin Phosphate USP) for IM/IV Injection.
Cleodin 600 IM/IV Injection: Each ampoule contains 4 ml sterile solution of Clindamycin 600 mg (as Clindamycin Phosphate USP) for IM/IV Injection.

Pharmacodynamic Properties
Clindamycin exerts its bactericidal activity by inhibiting the synthesis of bacterial nucleic acid, acting specifically on 50S subunit of the bacterial ribosomes & affecting the process of peptide chain initiation, thus causing a cessation of protein synthesis.

Pharmacokinetic Properties
Clindamycin is rapidly absorbed after administration. The mean serum half life in adults: 2.38 hours & in children 1.8 to 3.4 hours. Presence of food in the stomach delays the appearance of Clindamycin in the serum but does not affect the peak concentration. Serum protein binding is 94%. Clindamycin is metabolized in the liver & excreted extensively in bile. Only 6-19% of bioactive form is excreted in the urine & 4% in feces.

Indications
Cleodin is indicated for the treatment of following infections:
• Lower respiratory tract infections including pneumonia, emphysema, and lung abscess.
• Skin and skin structure infection.
• Gynecological infection including endometritis, nongonococcal tubo-ovarian abscess, pelvic cellulitis and post surgical vaginal cuff infection.
• Intra-abdominal infection including peritonitis and intra-abdominal abscess.
• Bone and joint infection including acute hematogenous osteomyelitis.
• Septicemia.

Dosage and Administration
Dosage of Clindamycin Capsule
Adults: Serious infections : 150 to 300 mg every 6 hours.
More severe infections: 300 to 450 mg every 6 hours.
Pediatric Patients: Serious infections: 8 to 16 mg/kg/day divided into three or four equal doses. More severe infections : 16 to 20 mg/kg/day divided into three or four equal doses.
Dosage of Clindamycin IM/IV Injection
Adults: Serious infections: 600–1200 mg/day in 2, 3 or 4 equal doses. More severe infections: 1200–2700 mg/day in 2, 3 or 4 equal doses. In life-threatening situations doses of as much as 4800 mg daily can be given intravenously to adults. Single intramuscular injections of greater than 600 mg are not recommended.
Cleodin may be administered in the form of continuous IV infusion as follows:

To maintain serum Clindamycin levels	Infusion rate	Maintenance infusion rate
Above 4 mcg/ml	10 mg/min for 30 min	0.75 mg/min
Above 5 mcg/ml	15 mg/min for 30 min	1.00 mg/min
Above 6 mcg/ml	20 mg/min for 30 min	1.25 mg/min

Pediatric patients 1 month to 16 years: 20 to 40 mg/kg/day in 3 or 4 equal doses.
Neonates (less than 1 month): 15 to 20 mg/kg/day in 3 to 4 equal doses. In cases of β-hemolytic streptococcal infections, treatment should be continued for at least 10 days.
Dilution and Infusion Rates: Cleodin must be diluted prior to IV administration. The concentration of Cleodin in diluent for infusion should not exceed 18 mg per ml. Infusion rates should not exceed 30 mg per minute. The usual infusion dilutions and rates are as follows:

Dose	Diluent	Time
300 mg	50 ml	10 min
600 mg	50 ml	20 min
900 mg	50-100 ml	30 min
1200 mg	100 ml	40 min

Administration of more than 1200 mg in a single 1-hour infusion is not recommended.

Side Effects
The following reactions have been reported with the use of Cleodin.
Gastrointestinal: Colitis, abdominal pain, nausea & vomiting.
Hypersensitivity Reactions: Urticaria, skin rashes, *erythema multiforme, Stevens-Johnson syndrome,* anaphylactic reactions.
Skin and Mucous Membranes: Pruritus, vaginitis, exfoliative dermatitis
Liver: Jaundice and abnormalities in liver function.
Renal: Renal dysfunction as evidenced by *azotemia, oliguria* and *proteinuria.*
Local Reactions: Pain, induration & sterile abscess, *thrombophlebitis* etc.
Cardiovascular: Rarely *cardiopulmonary* arrest and *hypotension*.

Precautions
For older patients bowel frequency should be monitored. Cleodin should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Use in Pregnancy & Lactation
Pregnancy category B. But can be used with caution in pregnancy only if clearly needed.
Clindamycin is excreted in breast milk in small quantities. So caution should be exercised when it is administrated to a nursing mother.

Contraindications
This drug is contraindicated in individuals with a history of hypersensitivity to preparations containing Clindamycin or lincomycin.

Drug Interactions
Clindamycin has been shown to have neuromuscular blocking properties that may enhance the action of other neuromuscular blocking agents.

Over Dose
Overdose with Clindamycin is rare. Haemodialysis & peritoneal dialysis are not effective in removing Clindamycin from the serum. Overdose should be treated with simple gastric lavage. No specific antidote is known.

Storage Condition
Store in a cool & dry place away from light. Keep out of reach of children.

Commercial Pack
Cleodin 150 Capsule: Each box contains 3 blister packs of 10 capsules.
Cleodin 300 Capsule: Each box contains 3 blister packs of 10 capsules.
Cleodin 300 IM/IV Injection: Each box contains 1 blister pack of 5 ampoules of 2 ml sterile solution.
Cleodin 600 IM/IV Injection: Each box contains 1 blister pack of 5 ampoules of 4 ml sterile solution.

Manufactured by :
GENERAL Pharmaceuticals Ltd.
Gazipur, Bangladesh