Nimocal®

Nimodipine BP

Presentation
Nimocal® Tablet: Each film coated tablet contains Nimodipine BP 30 mg.

Description
Mechanism of Action: **Nimocal®** (Nimodipine) is a calcium channel blocker. The contractile processes of smooth muscle cells are dependent upon calcium ions, which enter these cells during depolarization as slow ionic transmembrane currents. **Nimocal®** (Nimodipine) inhibits calcium ion transfer into these cells and thus inhibits contractions of vascular smooth muscle. **Nimocal®** (Nimodipine) had a greater effect on cerebral arteries than on arteries elsewhere in the body, perhaps because it is highly lipophilic, allowing it to cross the blood-brain barrier; concentrations of Nimodipine as high as 12.5 ng/mL have been detected in the cerebrospinal fluid of Nimodipine-treated subarachnoid hemorrhage (SAH) patients.
The precise mechanism of action of **Nimocal®** (Nimodipine) in SAH in humans is unknown. Clinical studies demonstrates a favorable effect of **Nimocal®** (Nimodipine) on the severity of neurological deficits caused by cerebral vasospasm following SAH, there is no arteriographic evidence that the drug either prevents or relieves the spasm of these arteries.

Pharmacokinetics
Nimocal® (Nimodipine) is rapidly absorbed after oral administration, and peak concentrations are generally attained within one hour. The terminal elimination half-life is approximately 8 to 9 hours but earlier elimination rates are much more rapid, equivalent to a half-life of 1-2 hours; a consequence is the need for frequent (every 4 hours) dosing. **Nimocal®** (Nimodipine) is over 95% bound to plasma proteins. **Nimocal®** (Nimodipine) is eliminated almost exclusively in the form of metabolites and less than 1% is recovered in the urine as unchanged drug. Because of a high first-pass metabolism, the bioavailability of Nimodipine averages 13% after oral administration. The bioavailability is significantly increased in patients with hepatic cirrhosis, with Cmax approximately double that in normals which necessitates lowering the dose in this group of patients.

Indications and Uses
For the improvement of neurological outcome by reducing the incidence and severity of ischemic deficits in patients with subarachnoid hemorrhage from ruptured intracranial berry aneurysms regardless of their post-ictus neurological condition.

Dosage & Administration
Initial dose is 60 mg (Two **Nimocal®** Tablets) in every four hours interval for 21 consecutive days, preferably not less than one hour before or two hours after meals. Oral **Nimocal®** therapy should be commence within 96 hours of the subarachnoid hemorrhage.

Contraindications
Not known.

Side Effects
Although side effects from Nimodipine are not common, the following can occur: headache, dizziness, flushing (feeling of warmth), heartburn, fast heartbeat, slow heartbeat, upset stomach, stomach pain, constipation, depression etc.

Precautions
General: Blood pressure: Nimodipine has the hemodynamic effects expected of a calcium channel blocker, although they are generally not marked. Blood pressure should be carefully monitored during treatment with Nimodipine based on its known pharmacology and the known effects of calcium channel blockers.
Hepatic disease: The metabolism of Nimodipine is decreased in patients with impaired hepatic function. Such patients should have their blood pressure and pulse rate monitored closely and should be given a lower dose.

Use in Pregnancy
Large doses of Nimodipine have been shown to cause birth defects in animals. Human studies have not been done. Before you take Nimodipine, tell your doctor if you are pregnant or plan to become pregnant.

Use in Nursing Mothers
Nimodipine may pass into breast milk but has not been reported to cause problems; caution is advised. Consult your doctor for advice.

Use in Pediatric Patients
While there is no specific information on use of this medication in pediatric patients.

Storage Condition
Store below 30^{0}C, protect from light and moisture.

How Supplied
Nimocal® Tablet: Each box contains 30 tablets in Alu-Alu blister pack.

Manufactured by :
SQUARE
PHARMACEUTICALS LTD.
BANGLADESH