Bumecard®

Bumetanide

Presentation
Bumecard•1: Each tablet contains Bumetanide BP 1mg
Bumecard•5: Each tablet contains Bumetanide BP 5 mg
Bumecard•2 IV/IM Injection: Each 4 ml ampoule contains Bumetanide BP 2 mg.

Description
Bumetanide is a loop diuretic with a rapid onset and short duration of action. Pharmacological and clinical studies have shown that 1 mg Bumetanide has a diuretic potency equivalent to approximately 40 mg furosemide. The major site of Bumetanide action is the ascending limb of the loop of Henle.

Bumetanide inhibits sodium reabsorption in the ascending limb of the loop of Henle. Reabsorption of chloride in the ascending limb is also blocked by Bumetanide.

Bumetanide may have an additional action in the proximal tubule. Since phosphate reabsorption takes place largely in the proximal tubule, phosphaturia during Bumetanide induced diuresis is indicative of this additional action. This proximal tubular activity does not seem to be related to an inhibition of carbonic anhydrase. Bumetanide does not appear to have a noticeable action on the distal tubule.

Indications
Bumetanide is indicated for the treatment of edema associated with congestive heart failure, hepatic and renal disease, including the nephrotic syndrome.

Dosage & Administration
Oral
1 mg in the morning , repeated after 6-8 hours if necessary, In severe cases , 5 mg daily increased by 5 mg every 12-24 hours according to response. Elderly , 500 micrograms daily may be sufficient.
Parenteral
By IV Injection: 1-2 mg, repeated after 20 minutes if necessary. Elderly, 500 micrograms (1 ml of Bumecard) daily may be sufficient.

By IV Infusion: 2-5 mg over 30-60 minutes.Elderly, 500 micrograms (1 ml of Bumecard) daily may be sufficient.

By IM Injection: 1 mg initially then adjusted according to response , Elderly 500 micrograms (1 ml of Bumecard) daily may be sufficient.

Contraindications
Loop diuretics should be avoided in severe hypokalaemia, severe hyponatraemia, anuria, comatose and precomatose states associated with liver cirrhosis and in renal failure .

Precaution
Serum potassium should be measured periodically and potassium supplements or potassium sparing diuretics added if necessary.

Side-effects
Muscle cramps (1.1%), dizziness (1.1%), hypotension (0.8%), headache (0.6%), nausea (0.6%)
Others (ECG changes (0.4 %), musculoskeletal pain (0.2 %), Abdominal pain (0.2 %), renal failure (0.1%), thrombocytopenia (0.2%) etc.

Drug interaction
Lithium: Lithium should generally not be given with diuretics because they reduce its renal clearance and add a high risk of lithium toxicity.

Probenecid: should not be administered concurrently with Bumetanide.

Indomethacin: Concurrent therapy with Bumetanide is not recommended.

Antihypertensives: Bumetanide may potentiate the effect of various antihypertensive drugs, necessitating a reduction in the dosage of these drugs.

Digoxin: Interaction studies in humans have shown no effect on digoxin blood levels.

Anticoagulants: Interaction studies in humans have shown Bumetanide to have no effect on warfarin metabolism.

Overdose
Overdosage can lead to acute profound water loss, volume and electrolyte depletion, dehydration, reduction of blood volume and circulatory collapse with a possibility of vascular thrombosis and embolism. Treatment consists of replacement of fluid and electrolyte losses by careful monitoring of the urine and electrolyte output and serum electrolyte levels.

Use in Pregnancy & Lactation
Pregnancy
Pregnancy Category C. There are no adequate and well controlled studies in pregnant woman .
Lactation
It is not known wheather this drug is excreted in human milk.

Paediatric use
Safety and effectiveness in paediatric patients below the age of 18 have not been established.

Commercial Pack
Bumecard•1: Each box contains 3 alu-PVDC strips of 10 tablets.
Bumecard•5: Each box contains 3 alu-PVDC strips of 10 tablets.
Bumecard•2 IV/IM Injection: Each box contains 5 ampolues of 4 ml solution for injection .

Manufactured by
Incepta Pharmaceuticals Ltd
Dhaka, Bangladesh

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