PIRACETAM

Indications/Uses

Listed in Dosage.

Dosage/Direction for Use

Adult : PO Adjunct in cortical myoclonus Initial: 7.2 g/day in 2-3 divided doses; may increase by 4.8 g every 3-4 days. Max: 24 g/day. As a cognitive enhancer in cerebrocortical insufficiency 2.4 g daily in 2-3 divided doses. For severe cases: Up to 4.8 g daily or higher. IV Adjunct in cortical myoclonus Initial: 7.2 g/day in 2-3 divided doses; may increase by 4.8 g every 3-4 days. Max: 24 g/day in 2-3 divided doses. As a cognitive enhancer in cerebrocortical insufficiency 2.4 g daily in 2-3 divided doses. For severe cases: Up to 4.8 g daily or higher.

Dosage Details

Intravenous

Adjunct in cortical myoclonus

Adult: Initially, 7.2 g daily in 2-3 divided doses; may increase by 4.8 g every 3-4 days. Max: 24 g daily.

Intravenous

Cognitive enhancer in cerebrocortical insufficiency

Adult: 2.4 g daily in 2-3 divided doses. For severe cases: Up to 4.8 g daily or higher.

Oral

Adjunct in cortical myoclonus

Adult: Initially, 7.2 g daily in 2-3 divided doses; may increase by 4.8 g every 3-4 days. Max: 24 g daily in 2-3 divided doses.

Oral

Cognitive enhancer in cerebrocortical insufficiency

Adult: 2.4 g daily in 2-3 divided doses. For severe cases: Up to 4.8 g daily or higher.

Renal Impairment

CrCl (mL/min)	Dosage
<20 mL/min	Contraindicated.
20-<30	1/6 of the usual dose once daily.
30-<50	1/3 of the usual dose in 2 divided doses.

50-80

2/3 of the usual dose in 2-3 divided doses.

Administration

May be taken with or without food. Take w/ a glass of water or soft drink to mask bitter taste.

Contraindications

Cerebral haemorrhage, Huntington's chorea. ESRD (CrCl <20 mL/min). Pregnancy and lactation.

Special Precautions

Patient w/ history of haemorrhagic CVA, risk of bleeding (e.g. GI ulcer), underlying haemostasis disorder, severe haemorrhage; to undergo major surgery including dental surgery. Mild to moderate renal impairment. Avoid abrupt withdrawal.

Adverse Reactions

Nervous: Hyperkinesia, somnolence, nervousness, confusion, hallucinations, depression, asthenia, ataxia, vertigo, headache, insomnia, aggravated epilepsy, impaired balance.

GI: Abdominal pain, diarrhoea, nausea, vomiting.

Endocrine: Wt gain.

Haematologic: Haemorrhagic disorder.

Dermatologic: Angioneurotic oedema, dermatitis, pruritus, urticaria.

Patient Counseling Information

This drug may cause hyperkinesia, somnolence and nervousness, if affected, do not drive or operate machinery.

Drug Interactions

May cause confusion, irritability and sleep disorder w/ thyroid extract (T3 and T4). Increased pharmacological effect of anticoagulants, antiplatelet (e.g. acetylsalicylic acid).

Action

Description: Piracetam is a GABA derivative classified as a nootropic agent. The exact mechanism of action is not yet fully elucidated however, it has neuronal and vascular properties. It exerts neuronal effect by protecting the cerebral cortex from various insults (e.g. hypoxia, intoxications). It also has vascular effects on platelets, RBC, and vessel walls by inhibiting platelet aggregation, improves erythrocyte deformability and reduces blood viscosity.

Pharmacokinetics:

Absorption: Rapidly and almost completely absorbed from the GI tract. Time to peak plasma concentration: W/in 1.5 hr.

Distribution: Crosses the blood brain barrier, placenta and enters breast milk. Volume of distribution: 0.7 L/kg.

Excretion: Mainly via urine (approx 90%, as unchanged drug). Plasma elimination half-life: 5 hr.

Chemical Structure

Click on icon to see table/diagram/image

Storage

Store below 25°C.

MIMS Class

Nootropics & Neurotonics/Neurotrophics

ATC Classification

N06BX03 - piracetam ; Belongs to the class of other psychostimulants and nootropics.