

PIRACETAM:

Class: Antimyoclonic, Nootropic

Indications: Enhance cognition in the elderly; cortical myoclonus; sickle cell anemia

Available dosage form in the hospital: CAP (400MG, 800MG), 1G /5ML INJ, 20MG/100ML SYRP

Dosage:

Cognitive disorders: Oral, I.V.: Dosage range: 1.2-4.8 g daily administered in 2-3 divided doses. May start at higher end of range according to initial severity of symptoms.

Cortical myoclonus, adjunctive: Oral, I.V.: Initial: 7.2 g daily administered in 2-3 divided doses. May increase total daily dose by 4.8 g every 3-4 days if needed (maximum daily dose: 24 g). Consider dosage reduction or gradual withdrawal of piracetam therapy every 6 months if symptoms are controlled; reduce daily dose by 1.2 g every 2 days (every 3-4 days for patients with Lance-Adams syndrome).

Vertigo: Oral, I.V.: 2.4-4.8 g daily administered in 2-3 divided doses

Hepatic impairment:

No dosage adjustment necessary.

Renal impairment:

$Cl_{cr} > 80$ mL/minute: No dosage adjustment necessary.

$Cl_{cr} 50-80$ mL/minute: Initial and maximum dose: Decrease to $\frac{2}{3}$ of the normal daily dose administered in 2-3 divided doses.

$Cl_{cr} 30$ to < 50 mL/minute: Initial and maximum dose: Decrease to $\frac{1}{3}$ of the normal daily dose administered in 2 divided doses.

$Cl_{cr} 20$ to < 30 mL/minute: Decrease to $\frac{1}{6}$ of the normal daily dose administered once daily.

$Cl_{cr} < 20$ mL/minute: Use is contraindicated.

Common side effect:

Weight gain, nervousness, hyperkinesia; less commonly drowsiness, depression, asthenia,; also reported abdominal pain, nausea, vomiting, diarrhoea, headache, anxiety, confusion, hallucination, vertigo, ataxia, insomnia, and rash

Pregnancy Risk Factor :

Adverse events have not been observed in animal reproduction studies. Piracetam crosses placental barrier with neonatal levels ~70% to 90% of maternal levels. In general, higher risk of teratogenic effects may be associated with anticonvulsant polytherapy compared to monotherapy (Morrow, 2006).