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\text{cr} >80 mL/minute: No dosage adjustment necessary.

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

Cl\text{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).