Paracetamol

Class: Analgesic, Miscellaneous

Indications: Treatment of mild-to-moderate pain and fever (analgesic/antipyretic)

I.V.: Additional indication: Management of moderate-to-severe pain when combined with opioid analgesia

Available dosage form in the hospital: Tablet, oral: 500 mg.

Suspension, oral: 120 mg/5 mL, 125 mg/5 mL, 250 mg/5 mL.

Suppository, rectal: 120 mg, 125 mg, 250 mg.

Injection, solution: 1 g, 2 g.

Dosage: **Note:** No dose adjustment required if converting between different acetaminophen formulations. Limit acetaminophen dose from all sources (prescription and OTC) to <4 g daily.

Pain or fever:

-*Oral:* **Note:** OTC dosing recommendations may vary by product and/or manufacturer.

-Regular release: 325-650 mg every 4-6 hours or 1000 mg 3-4 times daily (maximum: 4 g daily)

-Extended release: 1300 mg every 8 hours (maximum: 3.9 g daily)

-*Rectal:* 325-650 mg every 4-6 hours or 1000 mg 3-4 times daily (maximum: 4 g daily)

-*I.V.:*

-<50 kg: 15 mg/kg every 6 hours or 12.5 mg/kg every 4 hours; maximum single dose: 750 mg/dose; maximum daily dose: 75 mg/kg/day (≤3.75 g daily)

-≥50 kg: 650 mg every 4 hours or 1000 mg every 6 hours; maximum single dose: 1000 mg/dose; maximum daily dose: 4 g daily

Renal Impairment:
-Oral (Aronoff, 2007):

- Cl_{cr} 10-50 mL/minute: Administer every 6 hours.
- Cl_{cr} <10 mL/minute: Administer every 8 hours.
- Intermittent hemodialysis or peritoneal dialysis: No adjustment necessary.
- CRRT: Administer every 8 hours.

- I.V.: Cl_{cr} ≤30 mL/minute: Use with caution; consider decreasing daily dose and extending dosing interval.

Hepatic Impairment:

-Oral: Use with caution. Limited, low-dose therapy is usually well tolerated in hepatic disease/cirrhosis. However, cases of hepatotoxicity at daily acetaminophen dosages <4 g daily have been reported. Avoid chronic use in hepatic impairment.

- I.V.:Mild-to-moderate impairment: Use with caution in hepatic impairment or active liver disease; manufacturer's labeling suggests a reduced total daily dosage may be warranted, although no specific dosage adjustments are provided.

Severe impairment: Use is contraindicated.

Common side effects: **Oral, Rectal:** Frequency not defined:

Dermatologic: Rash

Endocrine & metabolic: May increase chloride, uric acid, glucose; may decrease sodium, bicarbonate, calcium

Hematologic: Anemia, blood dyscrasias (neutropenia, pancytopenia, leukopenia)

Hepatic: Bilirubin increased, alkaline phosphatase increased

Renal: Ammonia increased, nephrotoxicity with chronic overdose, analgesic nephropathy

Miscellaneous: Hypersensitivity reactions (rare)

I.V.:

Gastrointestinal: Nausea (adults 34%; children ≥5%), vomiting (adults 15%; children ≥5%)

Pregnancy Risk Factor: C (intravenous)