

INTRAVENOUS COLCHICINE

IMPROPER INTRAVENOUS COLCHICINE THERAPY HAS BEEN ASSOCIATED WITH BONE MARROW SUPPRESSION, RENAL FAILURE, DISSEMINATED INTRAVASCULAR COAGULATION, TISSUE NECROSIS FROM EXTRAVASCULAR EXTRAVASATION AND DEATH

Serious colchicine toxicity can occur in several different clinical scenarios.

Toxicity from acute ingestion of large doses has a fairly predictable sequence.

First 24 hours, the primary manifestation is gastrointestinal toxicity

Within 1 to 3 days, multi-organ involvement is seen, followed by the gradual resolution of symptoms.

More serious consequences of colchicine toxicity are rhabdomyolysis, bone marrow suppression with pancytopenia, and disseminated intravascular coagulation.

Toxicity has been reported with the chronic oral use of colchicine as well, though the onset may be more insidious. This likely involves patient-specific factors such as renal insufficiency, liver disease, or inhibition of colchicine clearance by other drugs, specifically cyclosporine, cimetidine, and erythromycin.

Because of the seriousness of colchicine intoxication as well as the high mortality reported, some authors have advocated eliminating or greatly restricting the use of intravenous colchicine. There has been mounting concern regarding adverse events in hospitalized patients, including medication errors and their potentially devastating effects.

Oral and IV Dosage

Oral: Initial dose, 1 to 1.2 milligrams, then 0.5 to 0.6 milligram (one tablet) every hour OR 1 to 1.2 milligrams every two hours OR

0.5 to 0.6 milligram every 2 to 3 hours until symptoms abate or gastrointestinal side effects (stomach pain, vomiting or diarrhea) occur

- Maximum dose, 4 to 8 milligrams total; 6 milligram cumulative oral dose per attack should not be exceeded - A minimum 3-day colchicine free interval should follow each oral treatment course to minimize the risk of cumulative toxicity
- In patients with Crcl 10 to 50 ml/min NMT 2 mg LD or 0.6 mg PO daily to every other day. **Less than 10 ml/min; CONTRAINDICATED.**

Most clinicians state that **COLCHICINE intravenously** administered should be limited to **a single infusion of 1 mg and no more** colchicine should be given by any **route** for at **least 7 days.**

Ali's recommendations: intravenous administration of colchicine should be **avoided in** favor of **corticosteroid or analgesic therapy.**