Colchicine poisoning: defusing the ticking time bomb

We would once again like to shine the spotlight on the danger of colchicine in overdose/poisoning and propose a possible solution to decrease its potential morbidity and mortality in these situations. We agree with our rheumatology colleagues that when taken correctly, it is very beneficial to patients who suffer from gout; however, due to some prescribing practices, it may be a proverbial “ticking time bomb” in many households.

A recent case at our hospital highlights this. An adolescent patient (91.5 kg) spontaneously “took a handful” of her father’s colchicine in a self-harm attempt after an argument. She presented with nausea, vomiting and profuse diarrhoea the following day. From the recently filled bottle of 0.5 mg tablets, 43 out of the 100 tablets were missing, meaning she ingested a maximum of 0.24 mg/kg, which would be consistent with her signs and symptoms.

Good supportive care, the only treatment available for colchicine poisoning, was provided, and she recovered and was discharged 6 days later without sequelae. Sadly, at the time of writing this letter, another patient within our DHB with a known colchicine overdose of 1.4 mg/kg died. Mortality approaches 100% for ingestions of >0.8 mg/kg and when considering the small size of the tablet (Figure 1), it is easy to see how a “handful” of tablets in a spontaneous overdose can be significant.¹

Figure 1. 0.5 mg tablet on a 10 cent coin

Colchicine is currently listed as a “stat” medication with PHARMAC, meaning that if a 3-month supply of 0.5 mg of colchicine twice daily for prevention of gout is prescribed, 180 0.5 mg tablets could be dispensed in a single bottle.² If this amount is ingested by someone weighing 72 kg or less, it is almost always 100% fatal, even with the best medical care available.¹ We understand that the majority of patients use colchicine in acute gout flares rather than prophylaxis, however even then some providers, rightfully taking into consideration the cost of medications to patients, commonly prescribe 100-plus tablets.
We agree with Dr Dalbeth and her colleagues that stating “colchicine…must be used with extreme care” may be alarmist and may discourage practitioners from prescribing a very useful drug in the treatment of gout and that is not the intent of this letter. It is not the “quality” that is in question, rather the “quantity” of the tablets being dispensed at one time that we are wanting to draw attention too.

We are urging prescribers to write for a maximum quantity per dispensing of 30 0.5 mg tablets with repeats sufficient for a 3 months’ supply. This would decrease the quantity per bottle, limiting morbidity and mortality in accidental poisonings as seen with children, and spontaneous intentional overdoses (especially the adolescent) in which the patient just grabs the first bottle of medication they have access too.

We are sensitive to the cost and convenience aspects to patients. The $5 copayment will cover the entire 3 months’ supply regardless of the number of repeats.

The prescriber only needs to:

- State they only want up to 30 tabs dispensed at once.
- Include refills/repeats sufficient for up to 3 months’ supply.

While it may be slightly inconvenient for patients to pick up a new bottle every two weeks, we feel it is a worthwhile compromise to remove a potential harm from the medicine cabinet.

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References: