Old drug, new data, continued vigilance

Current innovative drug development is spurred by paradigms of pathophysiology and enabled by the use of molecular modeling and genetic engineering. But many “new” drugs are actually second- and third-generation compounds, extolled as improvements over their parental lineage, with only slight if any clinical advantage. It is comforting when an old friend is rediscovered and demonstrated to have significant efficacy. In this issue (page 385), Saltzman and Weitz summarize their recommendations for the use of colchicine, not for gout, but for the treatment and prevention of pericarditis.

Chronic low oral dosing provides safe and effective prophylaxis against recurrent attacks of gout, familial Mediterranean fever, and pericarditis. Low-dose colchicine is cheap and seems far safer than chronic use of nonsteroidal anti-inflammatory drugs or prednisone for prophylaxis.

Vigilant monitoring of patients on chronic low-dose colchicine must be maintained. Patients can develop an acute or indolent reversible vacuolar axonal neurotoxicity. This may be associated with painful distal paresthesias, myalgias, and frank weakness. The creatine kinase (CK) may be elevated. This syndrome is particularly likely to develop in the setting of reduced glomerular filtration rate or with altered colchicine metabolism due to a drug interaction. Cardiac and respiratory muscles may be affected.

Particular concern must be exercised when a macrolide antibiotic or statin drug is prescribed to a patient receiving chronic colchicine. Patients and physicians are likely to attribute the symptoms to the statin and not to the colchicine. Other drugs also impede colchicine metabolism by competing with cytochrome P-450 metabolism or the multidrug efflux transporter that pumps colchicine out of cells.

I have had excellent experience using colchicine as a prophylactic agent, and it is comforting to prescribe a cheap and effective old friend. But familiarity should not dampen vigilance. Patients should be regularly asked about side effects. We need to be wary regarding drug interactions, and I check an occasional CK. But it is nice to see experience validated by controlled clinical trials.

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