PALLIATIVE CARE CAN NEUROTOXICITY BE PREVENTED?

For patients with colon cancer, treatment with oxaliplatin is an option with curative potential for those with early-stage disease, and in patients presenting later it is used to prolong survival. Unfortunately, this important drug is associated with sensory neuropathy, which is often the dose-limiting toxicity and frequently results in patients withdrawing from therapy.

A study by Axel Grothey, Charles Loprinzi and coworkers has indicated that sensory neurotoxicity induced by oxaliplatin treatment can be prevented. Loprinzi explained that “intravenous calcium and magnesium were proposed to be beneficial in decreasing neuropathy.” This proposal was based on a retrospective trial that showed less neuropathy in patients receiving the ion treatment than those without.

The researchers originally planned to recruit 300 patients to a prospective, randomized, placebo-controlled trial; however, during recruitment another trial reported that ion therapy reduced chemotherapy efficacy and all patients were withdrawn from the study. These data were later refuted and Loprinzi states, “we feel quite confident that the calcium and magnesium treatment does not decrease oxaliplatin efficacy.”

Despite enforced termination and limited numbers, the present study reported significant reduction in the primary end points of neuropathy as assessed by clinician and patient reported measures in those receiving ion therapy. “Although we were limited in terms of assessing what happens after 6 months because of the early closure, we believe that our study was a positive clinical trial,” asserts Loprinzi.

The next stage for this promising treatment is a trial (currently recruiting) that will use the new EORTC-CIPN-20 questionnaire to assess neuropathy and will hopefully report results in 2013.

Rebecca Kirk

Original article Grothey, A. *et al.* Intravenous calcium and magnesium for oxaliplatin-induced sensory neurotoxicity in adjuvant colon cancer: NCCTG N04C7. *J. Clin. Oncol.* 29, 421–427 (2011)