Oxaliplatin

S

Interstitial lung disease exacerbation in elderly patients: 3 case reports

Three elderly patients received oxaliplatin as part of FOLFOX therapy for colorectal cancer (CRC) and developed exacerbations of pre-existing interstitial lung disease; patient 1 subsequently died.

Patient 1 was a 71-year-old man with a history of pulmonary infiltrates that were first observed in 1999. In 2005, he was diagnosed with CRC and underwent resection, followed by six cycles of FOLFOX comprising IV of oxaliplatin 180 mg/cycle [*frequency not clearly stated*], folinic acid [leucovorin] and fluorouracil. During his sixth cycle of oxaliplatin infusion, he developed acute dyspnoea and cough [*frequency and duration of treatment to reaction onset not clearly stated*], and oxaliplatin was interrupted. A chest X-ray revealed new infiltrates, which were thought to reflect a hypersensitivity reaction to oxaliplatin and improved with the administration of methylprednisolone. However, 3 weeks later, he developed dyspnoea and fever with an oxygen saturation of 70–75%, and was hospitalised. CT angiography revealed new, bilateral and extensive areas of ground-glass opacities. He subsequently underwent mechanical ventilation, and received empirical antibacterial therapy (vancomycin, levofloxacin, meropenem), methylprednisolone and nitric oxide, but his condition progressed with a further CT scan showing fibrotic infiltrates. He died due to refractory respiratory failure after 30 days' ventilation.

Patient 2, a 77-year-old woman, was diagnosed with CRC in February 2006 and subsequently underwent a right hemicolectomy, followed by 12 FOLFOX cycles of IV oxaliplatin 110mg [*frequency not stated*], folinic acid and fluorouracil between March and August 2006. Within 1 month of chemotherapy completion, she developed a dry, nonproductive cough with dyspnoea on exertion. On evaluation in November 2006, high-resolution CT (HRCT) scan findings were consistent with nonspecific interstitial pneumonia; further investigation identified a CT scan performed 9 months previously at CRC diagnosis, which showed ground glass opacities. Over the 6 months following the last oxaliplatin infusion, her cough and dyspnoea gradually improved, and HRCT findings were stable, without specific therapy.

Patient 3, a 69-year-old man, was diagnosed with CRC in December 2005 and underwent a right hemicolectomy, followed by six FOLFOX cycles including oxaliplatin [*dosage not stated*] from February 2006 to August 2006. During the last cycle, he developed increasing fatigue and shortness of breath with an oxygen saturation of 75%, and was hospitalised. CT angiography showed bilateral fibrotic pulmonary infiltrates with traction bronchiectasis and honeycombing. He failed to improve with levofloxacin and azithromycin. Based on subsequent bronchoscopy and biopsy results, a presumed diagnosis of cryptogenic organising pneumonia was made. He was discharged under treatment with supplemental oxygen and prednisone therapy, but over the following month, his condition failed to improve. He underwent further evaluation in November 2006. At this time, he had marked reductions in lung function (FVC 65% predicted, FEV_1 64% predicted), and CT images from 1 month prior to chemotherapy initiation were examined and showed the presence of subpleural infiltrates. He started receiving empiric acetylcysteine and, at 5 months' follow-up, 8 months after last receiving oxaliplatin, he had experienced a dramatic improvement in symptoms and lung function (FVC 83% predicted, FEV_1 72% predicted).

Author comment: *The improvement observed in patients 2 and 3 is not typical of the natural history of interstitial lung disease and is consistent with an exacerbating event or a new lung injury causing exacerbation of the disease.*

Wilcox BE, et al. Exacerbation of pre-existing interstitial lung disease after oxaliplatin therapy: a report of three cases. Respiratory Medicine 102: 273-279, No. 2, Feb 2008 - USA 801104370