

ARTICLES

A phase II trial of pleurectomy/decortication followed by intrapleural and systemic chemotherapy for malignant pleural mesothelioma

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PURPOSE: This study investigated the feasibility of a novel approach to the treatment of malignant pleural mesothelioma by combining surgical resection with immediate postoperative intrapleural chemotherapy and subsequent systemic chemotherapy.

PATIENTS AND METHODS: Patients with biopsy-proven, resectable malignant pleural mesothelioma underwent pleurectomy/decortication immediately followed by intrapleural chemotherapy with cisplatin 100 mg/m² and mitomycin 8 mg/m². Systemic chemotherapy was started 3 to 5 weeks postoperatively and included cisplatin 50 mg/m² on days 1, 8, 15, 22, 36, 43, 50, and 57, and mitomycin 8 mg/m² on days 1 and 36. Patients were then monitored by serial chest and abdominal computed tomographic (CT) scans every 3 months until death or for a minimum of 18 months, whichever occurred first.

RESULTS: Of 36 patients entered onto the study, 28 had pleurectomy/decortication and intrapleural chemotherapy. There was one postoperative death, and two episodes of grade 4 renal toxicity after intrapleural chemotherapy. The 23 patients who also had systemic chemotherapy received a median of 80% and 87% of the planned total cisplatin and mitomycin doses, respectively. No grade 3 or 4 toxicities were observed. The overall survival rate of the 27 patients who were originally candidates for systemic chemotherapy was 68% at 1 year and 40% at 2 years, with a median survival duration of 17 months. Locoregional disease was the most common form of relapse (16 of 20 patients).

CONCLUSION: This short but aggressive combined modality regimen was generally well tolerated, but should not be used outside of a protocol setting because of the potential for serious toxicity. Overall survival was as good or better than with previously reported multimodality approaches, but other strategies are needed to improve local control.