

Effects of combined therapies on the survival of pleural mesothelioma patients treated in Brescia, 1982-2006

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ABSTRACT

Aims and background. During the 1990's, the traditional unimodal treatments (surgery, radiotherapy, chemotherapy, immunotherapy) for malignant pleural mesothelioma started to be combined in bimodal or multimodal strategies. However, recent population-based analyses of the survival of patients with malignant pleural mesothelioma indicate that even these treatments have not led to significant improvements in prognosis, which remains very poor. The present study assessed the survival of patients given combined treatments and multimodal therapies in a specialized hospital department.

Methods. The study population comprised 530 patients diagnosed with malignant pleural mesothelioma from 1982 to 2006: 343 of them were residents in the province of Brescia (Lombardy, Northern Italy) and 187 were residents outside the province, with a follow-up to 31 December 2009. Kaplan-Meier survival analyses and Cox proportional risks model were used to test sex, age at diagnosis, histological type and treatments, as prognostic factors.

Results. The estimated median survival for the whole group of patients was 317 days (257 for residents and 398 for non-residents), and respectively 310 and 340 days in the groups diagnosed in the periods 1982-2000 and 2001-2006. Multivariate analysis confirmed that the prognosis was better for younger patients and cases of epithelioid type malignant pleural mesothelioma, whereas for patients receiving any single treatment the prognosis was not significantly better than for those given palliative care alone. However, patients receiving combined treatments or the multimodality approach had significantly longer median survival and the relative risk of death was respectively 0.57 and 0.61 compared to untreated patients (or those only given symptomatic therapy).

Conclusions. This is the first study in Italy to assess the effectiveness of different treatment approaches in a significant number of patients treated in one hospital. Further studies are needed to confirm the improvement in prognosis – even if modest – on larger numbers of patients and taking into account the different stages of the disease.

Key words: pleural malignant mesothelioma, survival, therapy.

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