Risk factors for early death in multiple myeloma

Abstract

Introduction
Multiple myeloma (MM) is an incurable hematological malignant disorder that develops due to proliferation of plasma cells derived from B cells in the bone marrow. The incidence of MM in Sweden is around 6 persons per 100000/year which makes it the second most common hematological malignancy in the country. Today, treatment often consists of cortisone and various types of chemotherapy used in diverse combinations. New treatment options introduced during the last decades have improved the survival of patients with MM. However, around 10% of the patients still die early on in the wake of MM.

Methods
In this study we analyzed the cause of death in patients who died within the first year after being diagnosed with MM and compared it with obtained treatment as well as some individual variables, thus hoping to find risk factors for early death. Using the nationwide Swedish Blood Cancer Registry, INCA, we were able to find 53 suitable patients and data was collected through careful reading of their medical records.

Results
We found that the disease itself was the major cause of death rather than infections or other disease manifestations resulting from immunodeficiency. Staging according to ISS turned out to be an indicator for a more aggressive disease but apart from that, no major risk factors for early death were found.

Conclusions
The aggressiveness of the disease seems to be the main reason for early death for patients with MM. Because of the low number of patients involved in this study there is a need for future research.

Keywords
Multiple myeloma, early death, blood cancer registry