Underlying Cause of Death in Patients With Multiple Myeloma- a 21-Year Mortality Analysis

Parisa Aijaz MD[1], Amir Kamran MD[1], Hira Shaikh MD[2]
1- Charleston Area Medical Center, Charleston, WV
2- University of Iowa, Iowa City, Iowa

Charleston Area Medical Center
Vandalia Health

INTRODUCTION

Complications of multiple myeloma (MM) including renal disease, infections and anemia are well known.

There is limited data regarding underlying cause of death (UCD) in patients with MM.

METHODS

Retrospective observational study using the CDC WONDER (Wide-Ranging Online Data for Epidemiologic Research) multiple cause of death data set.

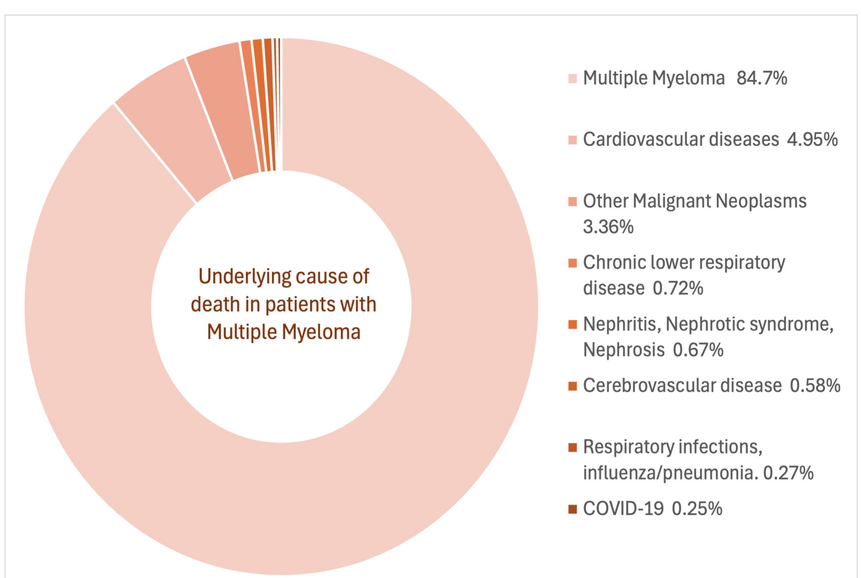
Included patients age > 45 with MM (ICD-10 C90.0) as contributing cause of death from 1999 to 2020.

Calculated age-adjusted mortality rates (AAMR) per 100,00 persons.

CONCLUSION

While multiple advances have been made in the treatment of multiple myeloma, disease progression continues to be the primary cause of death in the patients. Clinical trials are ongoing to look for newer treatment targets and assess best combinations to improve outcomes in this incurable disease.

RESULTS





291,314 multiple myeloma related deaths reported in US (54.3% male & 45.7% female)



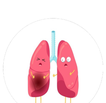
Multiple myeloma was identified as underlying cause of death (UCD) in 84.1% of patients



Cardiovascular diseases were the 2nd most common UCD 4.9%



Other malignant neoplasms ranked #3, 3.36%. Of these, 12.7% were GI malignancies, 10.8% leukemias, 5.3% lymphomas



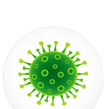
Chronic lower respiratory diseases were attributed as the UCD in 0.7% patients



Renal diseases & Cerebrovascular diseases were the UCD in 0.6% and 0.5% patients respectively



Respiratory infections were the UCD in 0.2% of the patients



COVID-19 was the 11th most common UCD. 0.2% of all MM related deaths & 4.7% of MM related deaths in 2020.