Incidence, mortality and trends of Multiple Myeloma in geriatrics: Monastir-Tunisia, 2002–2013

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Introduction

Multiple myeloma (MM), which derives from the neoplastic transformation and proliferation of a post-germinal center B-cell, is one of the most frequent hematological malignancies. Death rates have been falling over the last decade, which may be due to improving therapeutic landscape, novel drugs and better understanding of disease biology.

The objective of this study was to describe incidence, mortality rates, and trends for multiple myeloma (MM) in the Monastir region during 12 years contributing to better knowledge on the epidemiology of MM in Tunisia.

Methods

We have included all hospitalizations for MM (using ICD-10 coding: C 90) at the university hospital of Monastir between 2002 and 2013. Enrolled patients were residents of Monastir. Data were collected from the regional register of hospital morbidity and mortality implemented at the Department of Preventive Medicine and Epidemiology.

Results

- During the period of 12 years, 627 hospitalizations for multiple myeloma were recorded among people aged more than 65 years,
- The mean age was 72 years (SD= 5.5)
- sex ratio 1.11

Table 1: Number of patients and Crude Prevalence Rate of Multiple Myeloma in patients aged 65 years old and over in university hospital of Moanstir (2002-2013)

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	Effectifs (%)	CPR/ 100 000*
Age≥65 years	**627 (100%)**	120
Male	331 (52,8%)	134
Female	296 (47,2%)	107

*CPR: Crude Prevalence Rate/100 000 inh/ year

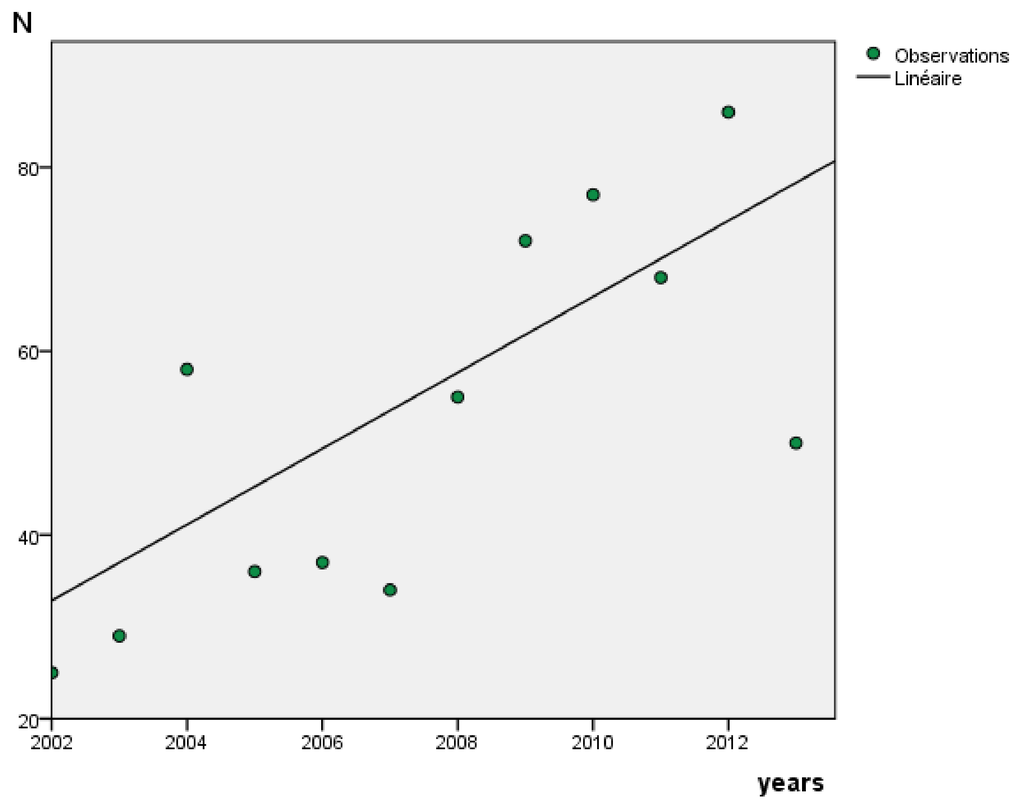

Figure 1 :Trends of Multiple Myeloma hospitalisations (2002-2013)

- We established a positive trend of MM from 2002 to 2013 (b=4.13; r=0,7; p<10-3).
- In-hospital lethality rate was 1.6%.

Discussion and Conclusion

Worldwide in 2016 there were 138 509 (95% uncertainty interval [UI], 121 000-155 480) incident cases of MM with an age-standardized incidence rate (ASIR) of 2.1 per 100 000 persons (95% UI, 1.8-2.3). Incident cases from 1990 to 2016 increased by 126% globally (1). Our study showed similar results. In fact, there has been a marked increase in the prevalence of multiple myeloma cases from 2002 to 2013. This may be the consequence of either a better accessibility to health services and better MM diagnosis or it may reflect a real increase of MM cases. Thus, further studies are needed to explain this trend.

(1) Cowan AJ, Allen C, Barac A, Basaleem H, Bensenor I, Curado MP, et al. Global Burden of Multiple Myeloma: A Systematic Analysis for the Global Burden of Disease Study 2016. JAMA Oncol. 16 mai 2018;