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Trends of classification, incidence, mortality, and survival of MDS patients in Switzerland between 2001 and 2012

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ABSTRACT

Myelodysplastic syndromes (MDS) are emerging disorders of the elderly with an increasing burden on healthcare systems. He we report on the first population-based, epidemiological analysis of patients diagnosed with MDS in Switzerland between 2001 and 2012. The aim of this study was to characterize the extent and limitations of currently available population-based, epidemiological data and formulate recommendations for future health services research. The investigated outcomes comprised trends of annual case frequency, classification of morphological subtypes, incidence, mortality and survival. Annual case frequency increased by 20% (from 263 to 315 cases per year), whereas age-standardized incidence-/mortality-rates remained stable (2.5/1.1 per 100′000 person-years). This observation reflects population growth as well as higher diagnostic awareness and not an increase of age-specific risk. However, it will inevitably influence the future prevalence of MDS and the impact on healthcare systems. Reporting of classification in MDS subtypes was poor with modest improvement from 20% to 39% and increased awareness for mainly higher-risk diseases. Relative survival for all patients at 5-years (RS) ranged between 37 and 40%. Significant better RS was found for younger compared to older higher-risk MDS patients (48% vs. 17%), reflecting the effect of allogeneic hematopoietic stem-cell transplantation. However, no survival advantage was found in elderly patients after introduction of hypomethylating agents as standard for care in this patient group. Our data is in line with results from other MDS and cancer registries. It allows formulating recommendations for future collaborative health services research on MDS patients with national and international partners.