HOSPITAL READMISSION AND MORTALITY AFTER FIRST ADMISSION ATTRIBUTED TO 10-11 DRGs: A RETROSPECTIVE STUDY
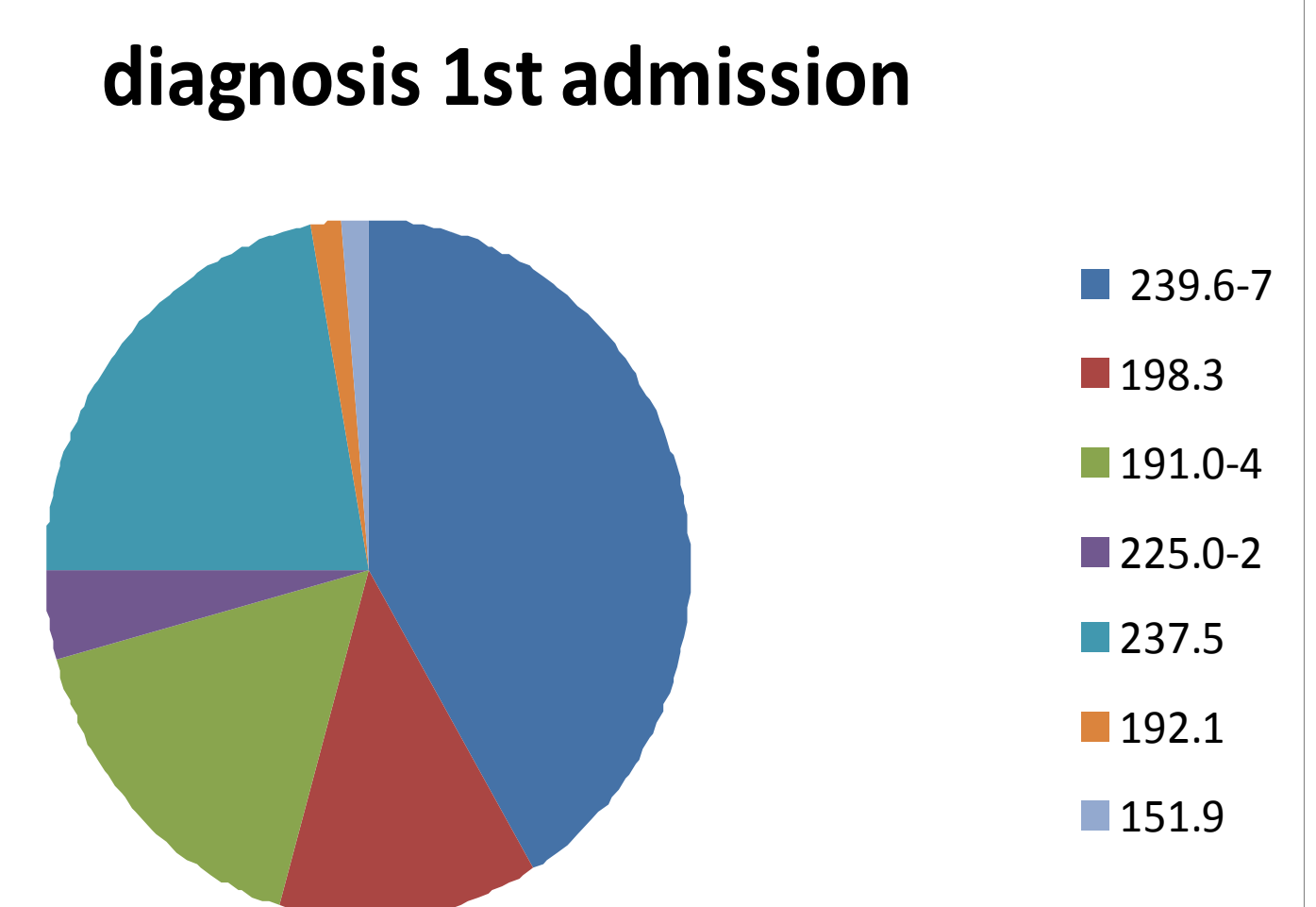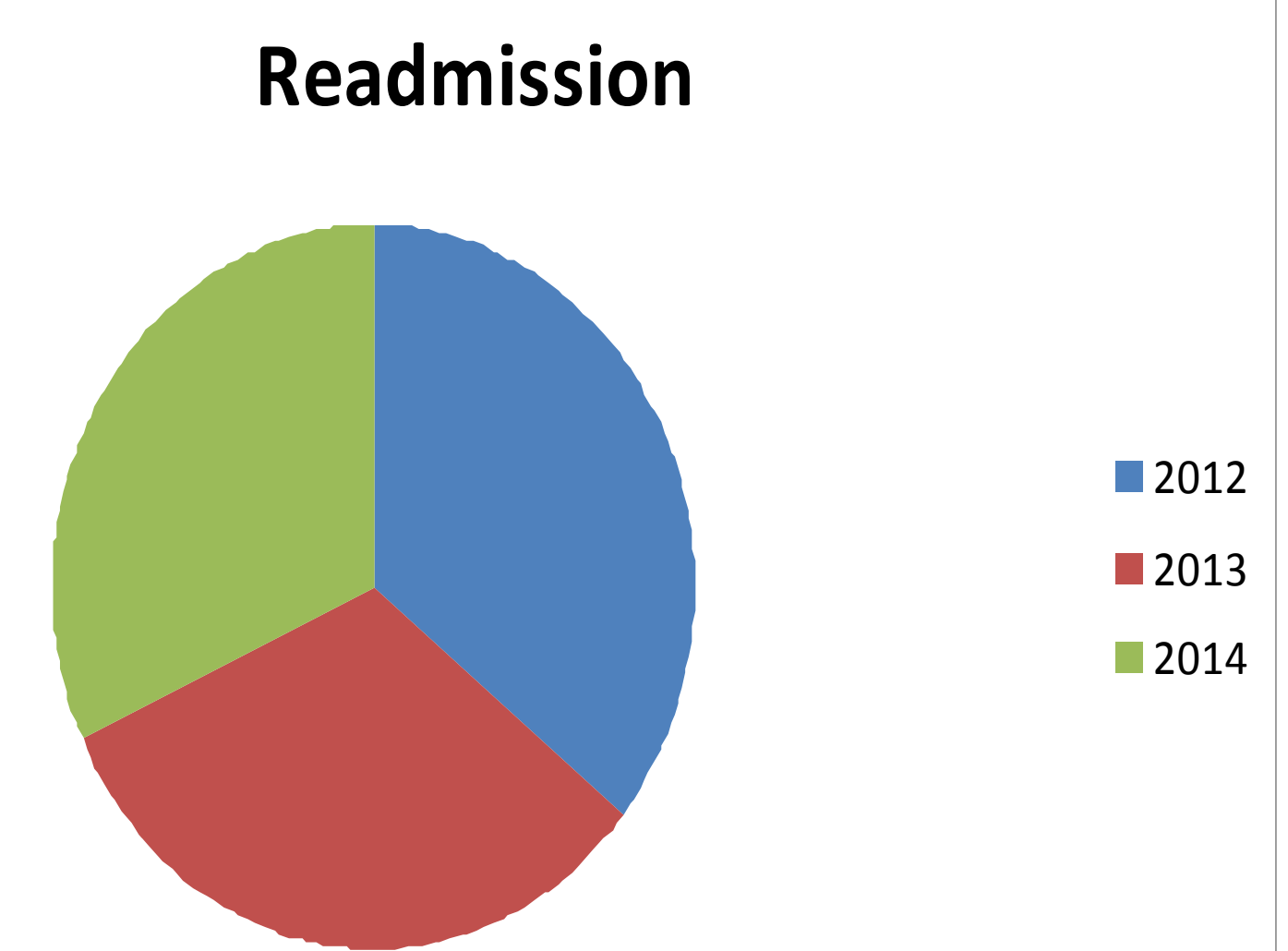
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Introduction: hospital readmission within 30 days caused by complications arisen during a previous admission is one of the main contributors to health care burden and might be considered a useful indicator of good clinical practice. Our aim is to investigate incidence, causes and predictors of hospital readmission and mortality in patients firstly hospitalized for episodes attributed to 10-11 DRGs.

Materials and methods: a retrospective analysis investigated all patients resident in ASL of Lodi firstly admitted to Neurology Department-AO Lodi- during 2012-2013-2014 and attributed to 10-11 DRGs, hospital readmissions within 30 days and mortality (intra-hospital and 30-days mortality). All useful epidemiologic, clinic and pharmacologic data were present in the ASL database. Causes of readmission and mortality were categorized on the basis of ICD IX-CM codes.

Results: during 2012-2014 triennium 2000 patients were hospitalized, with a total of 2355 episodes. 69 pts (37 M) were examined, whose discharge diagnosis was ascribed to 10-11 DRGs; they were submitted to 175 re-hospitalizations during the considered period. Median age was 69 ys in males, 70.5 in females; older age was overrepresented (63.7% aged>65 ys). 25 pts (12 M) were hospitalized in 2012; 29 (14 M) in 2013; 15 (11 M) in 2014. Readmission within 30 days was 1.93% (2012), 1.73% (2013), 1.71% (2014). Intra-hospital mortality was 24% (2012), 13.8% (2013) and 40% (2014); 30-days mortality was 0%, 13.8% and 13.3%, respectively. A slightly longer hospitalization was noticed in 2014, possibly due to infectious complications (4.3%). Among the whole sample of patients categorized as 10-11 DRG, first admissions were coded as ICD IX-CM 239.6 in 86.1%; epilepsy was present in 27.5% of hospital discharge records. 36 pts (15 M), median age 65, were submitted to neurosurgery. These latter patients at first discharge were coded as ICD IX-CM 235-237-239 in 78%; at second discharge were coded as 191-198 in 73%. Cardiovascular disease and peripheral neuropathy were the most represented co-morbidities (83.3% and 63% respectively). Health expenditure slightly increased during the examined triennium.

Readmission
- 2012
- 2013
- 2014

diagnosis 1st admission
- 239.6-7
- 198.3
- 191.0-4
- 225.0-2
- 237.5
- 192.1
- 151.9

Discussion and conclusions: a multidisciplinary team is of paramount importance in neuro-oncology. In the absence of a multidisciplinary clinical setting patient care might be fragmentary, consequently readmissions due to complications might increase and health expenditure might rise, too. The high prevalence of co-morbidities and complications is hypothesized to play a role in hospital readmission. A risk prediction model for hospital readmission might be useful in neuro-oncology

References
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