

## **SOUTH-EASTERN LOMBARDIA COMMON NEURO-ONCOLOGY NETWORK: A PROPEDEUTIC RETROSPECTIVE STUDY IN THE PROVINCES OF LODI, CREMONA AND MANTOVA**

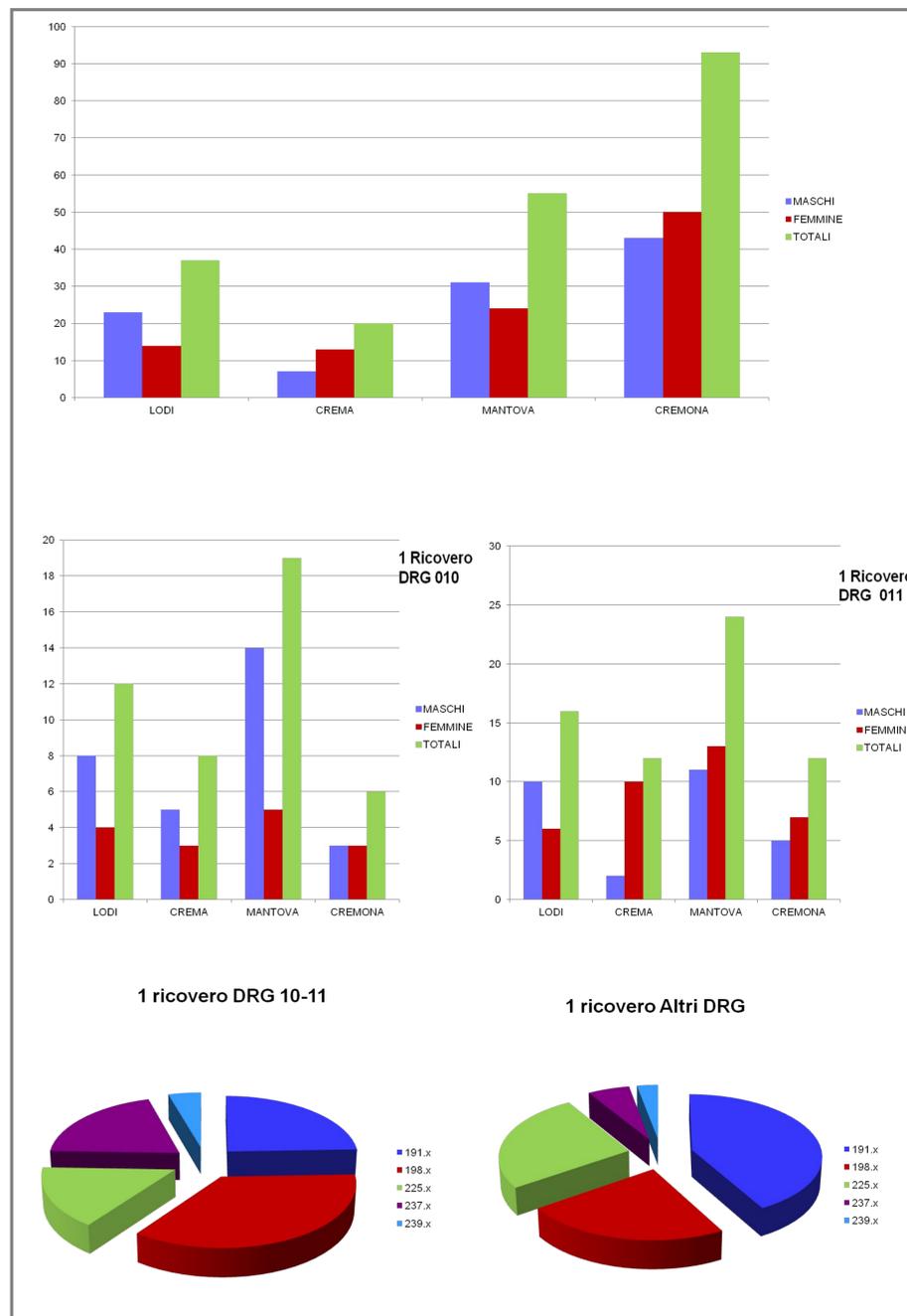
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**Objective:** to describe clinical course of neuro-oncologic patients in a south-eastern area of Lombardia, during calendar year 2015, and evaluate feasibility and potential clinical impact of a common neuro-oncologic network recently implemented in the same area, aimed at unifying diagnostic work-up, neurosurgical management, neuropathologic definition, medical treatment and follow-up according to a homogeneous and well-defined protocol.

**Materials and methods:** hospital admissions for brain tumor in the Provinces of Lodi, Cremona and Mantova (population 1.020.000, 82% adults) were collected, on the basis of hospital discharges records with ICDIX-CM codes of interest (191, 198, 202, 225, 237, 239) registered in Neurology (Lodi, Crema, Cremona, Mantova) and Neurosurgery Units (Cremona) of the considered area. Hospital discharges were stratified according to DRGs. Hospital readmissions, complications and intra-hospital mortality were also considered.

**Results:** 205 patients (104 M) were examined. Total admissions were 271; 144 pts had only 1 admission (median duration 10.3 days), 61 had >1 admission. Median age of pts was 68.5 (M), 67.5 (F). 55% of pts were aged >65 (in a previous study performed in the province of Lodi, 2012-2014, 64% of pts were aged >65). Mortality was 8.3%, 41% within 30 days from last admission. 109 hospital discharges referred to 10-11 DRGs, 96 referred to different DRGs. According to ICDIX-CM codes hospital discharges of first admission were reviewed and referred to code 191 (33%), 198 (24%), 225 (21%), 237 (15%) and 239 (7%) respectively. At first admission DRGs other than 10-11 referred to 1-2 DRGs in 61.4% (craniotomy, with or without complications), 18.5% referred to epilepsy. Co-morbidities were present: arterial hypertension (8.3%), infectious (3.4%) or vascular (6.8%) complications. Infectious complications increased to 19.7% during readmissions, whereas epilepsy and stroke were present in 8.2%.



**Discussion and Conclusions:** we found a notable incidence of neuro-oncology patients in the case-mix of Neurological Departments. Neurosurgical common reference wasn't yet well defined in 2015, so clinical course of pts might be dispersed. With respect to our previous study conducted in a restricted area (province of Lodi), 2012-2014, we noticed a trend to a lower median age of pts at first admission (55% aged >65 versus 64%). Our project is a neuro-oncologic network of South-Eastern Lombardy based on a multidisciplinary and multiprofessional team, aimed at optimizing clinical resources of the area, according to a "Hub and spoke" model, and to promote a standardized global care of neuro-oncologic patients, including hospital professionals, palliative care service, and general practitioners.