Primary Brain Tumors in Neurological Setting:

8 years of clinical evaluation

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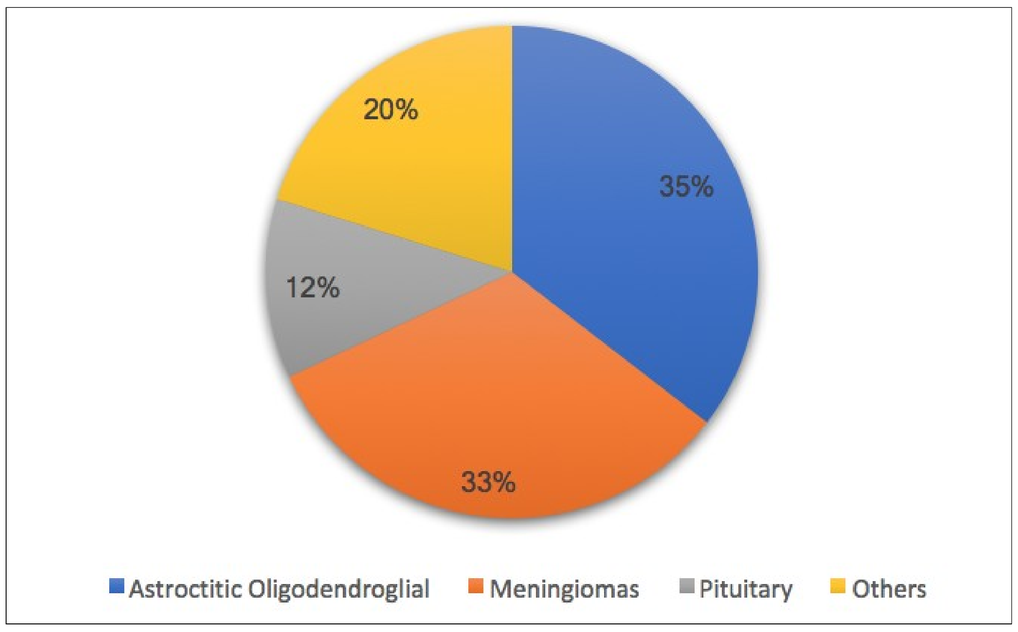
Aims: Primary brain tumors are classified according to the tissue of phylogenic origin. The 2016 World Health Organization Classification of Tumors of the Central Nervous System is both a conceptual and practical advance over its 2007 predecessor.

Aim of this study is to define prevalence of Primary Brain Tumors in our clinical setting, classifying with a histological point of view and clinical symptoms at the diagnosis moment.

Materials: We considered the oncological diagnosis at discharge of patients hospitalized at the Neurology and Neurosurgery ward of the Spedali Civili - Brescia in the last 8 years.

Method: CNS cancer diagnoses were classified according to the histological results. We calculated, the average age and the primary symptom of onset and the survival rate. Patients with an uncertain diagnosis or in the absence of histological data were excluded from analysis.



Results: Primary Brain Tumors was found in 1467 (77.9%) of 1858 patients. 26 patients refuse histological exam and were not analyzed. 511 patients (27%) was found with a diffuse astrocytic and oligodendroglial tumors with different grading level; meningiomas was found in 469 (25%) subjects, while 170 patients were found affected by pituitary primary lesion. Lymphoma and neurinoma was found in a little number of cases. Headache (of any kind) and epilepsy was the most frequent onset symptom (29% and 19% respectively), while a focal symptoms was found in a little percentage of patients (5%). The age at onset was 58,8 (SD + 15.4) with an average survival rate (not divided by diagnosis) 19 months (SD + 6.3).

Discussion: Primary Brain Tumors are not rare clinical reality that occur in young adult impact
on everyday life and productivity. The histological diagnosis appears to be the essential data in guiding the therapeutic decision of the neuroncologist.

Conclusion: a precise definition of the diagnosis, histological type, and extent of the lesion appears essential in the practice of neuro-oncologist, in light of the new WHO classification.

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