**BRAIN METASTASES FROM NSCLC: A MONOCENTRIC EXPERIENCE**

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**Background:** Non-small cell lung cancer (NSCLC) is the most common primary tumor developing brain metastases. However, prognostic parameters in patients with brain metastases from NSCLC are not well defined. The aim of our study was to establish the correlation between age, gender, Performance Score (PS), number of involved extracranial organs and survival (progression-free survival (PFS) and overall survival (OS)) in Moroccan patients with brain metastases from NSCLC.

**Methods:** We reviewed retrospectively 50 cases of metastatic NSCLC with cerebral metastases diagnosed between January 2009 to June 2012 in the Medical Oncology Department at Hassan II University Hospital in Morocco. Potential prognostic factors were investigated. Kaplan-Meier method was used to estimate median PFS and OS durations from the time of first cycle of chemotherapy. The Cox proportional hazards regression model was used to determine the effect of potential prognostic factors on PFS and OS.

**Results:** Median age was 56 years. Sex ratio male/female was 3.9. PS was 0-1 in 63.7% of cases. 45% of patients had more than one site of metastasis. All patients received bi-chemotherapy based on platinum in combination with a third generation drug. The objective response rate was 33.5%. Median duration of follow-up was 6.4 months (range: 1-36 months). The median PFS was 4 months [1-26] and median OS was 5 months [1-36]. Patients with involved extracranial organs had lower PFS (mean: 3 vs 4 months) and lower OS (mean: 4.8 versus 8 months). However, this correlation was not statistically significant (p = 0.5 and p = 0.07 respectively). Besides, PFS and OS were not significantly different based on the other potential prognostic factors.

**Conclusion:** In this study, there were a trend toward a correlation between OS and presence of extracranial metastasis in patients with brain metastases from NSCLC. However, we failed to demonstrate any prognostic role of age, gender and Performance Score in this population.