258. THE ANGIOGENIC PATHWAY OF GLIOBLASTOMA

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Background: There are over 130 different types of tumors in the central nervous system that include astrocytoma, glioblastoma, oligodendroglioma, meningioma, and schwannoma. From them, glioblastoma is considered the most common lethal primary brain tumor in adults.

Objective: To create an overview of different angiogenic pathways of the glioblastoma.

Material and Method: The 277 histopathologically confirmed consecutive primary brain tumors diagnosed at Department of Pathology of Emergency County Hospital of Tirgu-Mures, Romania, during 2012-2013, were retrospectively checked to see the incidence and immunohistochemical (IHC) particularities of glioblastoma. The immunostains were performed in 35 randomly selected glioblastomas, using the angiogenesis-related antibodies Vascular Endothelial Growth Factor (VEGF-A), COX-2, Maspin, and Epidermal Growth Factor Receptor (EGFR).

Results: From the 277 tumor cases, 62 (22.38%) were glioblastomas. Most of them (85.48%, n=53) were diagnosed in patients over 40, with a male:female ratio of 1.4:1. From the 35 cases used for IHC examinations, only 6 were marked by VEGF (17.14%), the other 29 (82.86%) being VEGF negative. No one of the cases showed maspin posivity. The rate of positivity for EGFR and COX-2 was 37.14% (n=13) and 60% (n=21), respectively. All of the 13 EGFR positive cases displayed COX-2 positivity and did not showed VEGF expression.

Conclusions: In glioblastoma cells, the angiogenesis is rather mediated by COX-2 than VEGF or maspin. In patients with VEGF negative glioblasomas, the anti-EGFR drugs could be succesfully used. The effect of anti-EGFR drugs can be improved when combined with anti-COX-2 agents.

259. USING BETA BLOCKERS IN DIABETES.

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Introduction. Cardiovascular complications of diabetes mellitus have a high incidence with repercussions affecting the patients' quality of life. Beta blockers have an important role in treating those complications. However, their use may be Associated with some harmful effects. So, the goal of this paper is to find out possible ways of safe beta blockers' use in treatment of diabetes mellitus.

Materials and methods. In order to achieve this goal, there was performed a profound analysis of bibliographical and reference sources referring to beta blockers use in diabetes treatment.