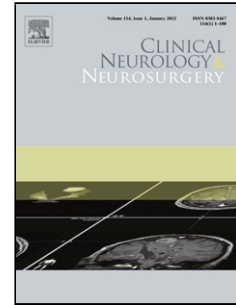


## Accepted Manuscript

Title: Matrix Metalloprotease-9 Expresssiosn in Meningioma: Correlation With Growth Fraction and Role of Gender. A Pilot Immunohistochemical Study

Authors: Erdinc Ozek, Deniz Ozcan, Suat Erol Celik, Ahmet Celal Iplikcioglu



PII: S0303-8467(18)30268-3  
DOI: <https://doi.org/10.1016/j.clineuro.2018.07.002>  
Reference: CLINEU 5091

To appear in: *Clinical Neurology and Neurosurgery*

Received date: 28-4-2018  
Revised date: 28-6-2018  
Accepted date: 1-7-2018

Please cite this article as: Ozek E, Ozcan D, Celik SE, Iplikcioglu AC, Matrix Metalloprotease-9 Expresssiosn in Meningioma: Correlation With Growth Fraction and Role of Gender. A Pilot Immunohistochemical Study, *Clinical Neurology and Neurosurgery* (2018), <https://doi.org/10.1016/j.clineuro.2018.07.002>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Matrix Metalloprotease-9 Expression in Meningioma: Correlation With Growth Fraction and Role of Gender

## A Pilot Immunohistochemical Study

Erdinc Ozek<sup>1,\*</sup> erdincozek@gmail.com, MD, Deniz Ozcan<sup>2</sup>, MD, Suat Erol Celik<sup>3</sup>, MD, Ahmet Celal Iplikcioglu<sup>4</sup>, MD

<sup>1</sup>Neurosurgery Department, Bezmialem Vakif University, Fatih, Istanbul/Turkey

<sup>2</sup>Pathology Department, Okmeydani Training and Research Hospital, Sisli, Istanbul/Turkey

<sup>3</sup>Neurosurgery Department, Okmeydani Training and Research Hospital, Sisli, Istanbul/Turkey

<sup>4</sup>Neurosurgery Department, Private Medicana Hospital, Beylikduzu, Istanbul/Turkey

\*Corresponding Author: Erdinc Ozek, M.D., Neurosurgery Clinic, Bezmialem University School Of Medicine, Istanbul, Turkey

### Highlights

- This study demonstrates the correlation of MMP9 with Ki67 and gender influence.
- MMP9 staining indices were significantly higher in women specimens.
- MMP-inhibitors and hormone receptor-antagonists could be included to chemotherapy.

### Abstract

Objective: Matrix metalloproteases (MMPs), particularly MMP2 and MMP9 increase tumor invasion and edema in meningiomas. Although lesser recognized, MMPs may also enhance cell growth via liberating growth factors or via cleaving inactive growth factors into active isoforms. However, there exist very few studies, which investigated correlation of MMPs with growth fraction in meningiomas. Meningiomas are seen more frequently in women and their growth accelerate during pregnancy. However, no study examined whether MMP-expressions in meningioma differ with gender.

Download English Version:

<https://daneshyari.com/en/article/8681671>

Download Persian Version:

<https://daneshyari.com/article/8681671>

[Daneshyari.com](https://daneshyari.com)