Pituitary Magnetic Resonance Imaging in Pituitary apoplexy

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INTRODUCTION
Pituitary apoplexy is a rare endocrine emergency characterized by sudden onset of severe headaches, vomiting, visual abnormalities and pituitary dysfunction secondary to an acute hemorrhage or infarction within a pituitary adenoma.

SUBJECTS AND METHODS
Through a retrospective study from 2000 to 2014 about 23 cases of pituitary apoplexy were observed. Their mean age was 38.7 years +/- 10 years, with a male to female ratio = 2 : 1.
All patients benefited Magnetic resonance imaging (MRI).

RESULTS
Pituitary (MRI) showed macroadenomas in all cases. These macroadenomas invade the optical chiasma in 87%, the cavernous sinuses in 48%, the sphenoid sinus in 39%. They have multidirectional extension in 22%. Areas of intratumoral hemorrhage were evident on MRI in 94% leading to the positive diagnosis of pituitary apoplexy which confirms the importance of pituitary MRI when investigating pituitary apoplexy.

CONCLUSION
Pituitary apoplexy is a rare life-threatening clinical syndrome caused by infarction or hemorrhage within a pituitary adenoma. Magnetic resonance imaging (MRI) is the investigation of choice and has been shown to confirm the diagnosis in 94% of patients which is compatible with guidelines and results of the literature. Once pituitary apoplexy is diagnosed a multidisciplinary team approach is mandatory in order to improve the outcome of this condition.