

Atypical and Malignant Meningiomas: Pathological features, Imaging finding, and Prognosis Factors.

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Introduction

The existence of atypical and malignant meningiomas was first recognized in 1938, and well defined by the World Health Organization (WHO) in 2000 revised in 2007. They represent about 5.7 to 10% of all Intracranial meningiomas.

Methods

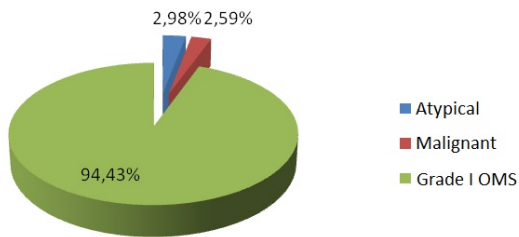
20 years retrospective study from 1990 to 2010 concerning all intracranial meningiomas treated in our neurosurgical department in University Hospital Center IBN RUSHD in Casablanca, Morocco.

Results

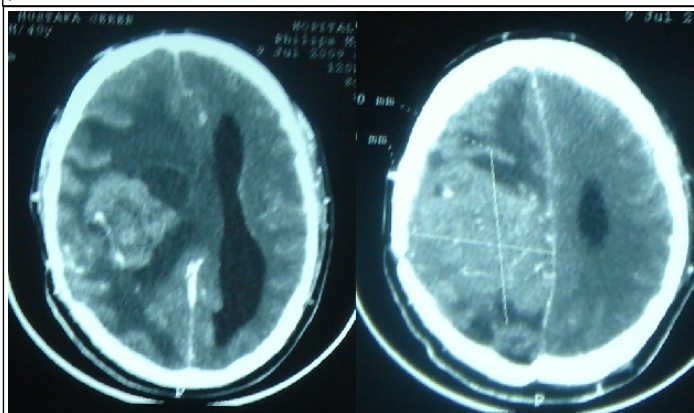
in this period, 772 intracranial meningiomas were treated, 21 were atypical (2.59%) and 23 were malignant (2.98%). Mean age was 40.29 years old and 25% were under 16, with a range from 1 month to 86 years old. Sex ratio was 1. clinical signs were not specific. MRI and brain CT showed heterogeneous lesions with cysts, calcification and important edema in most cases. resection quality was Simpson I in 59% of cases and Simpson IV in 38,63% of cases, a biopsy was done in 1 patient. 12 patients received radiotherapy after surgery. With a mean long term follow up of 10 years, about 34% of cases presented one time to four time meningioma recurrence, with a global survival of 58% at 5 years and 48% in 10 years.

Conclusions

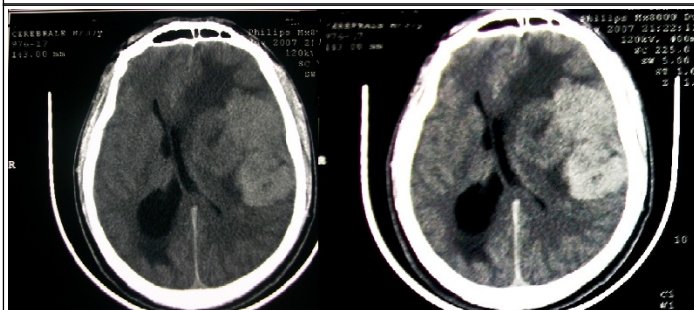
Despite finding of malignancy, Simpson I resection and low rate of recurrence were the two important prognosis factors in our series.



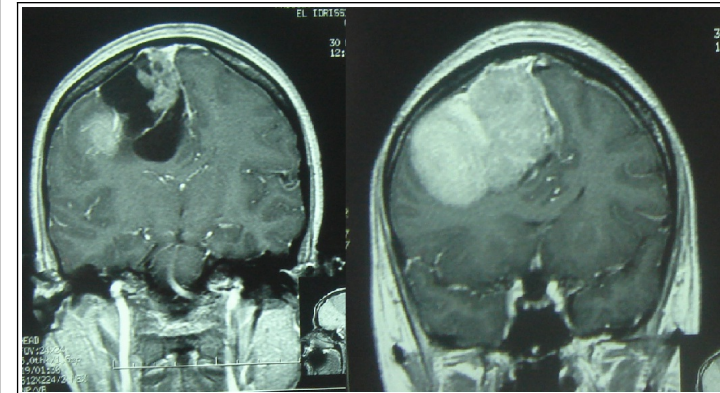
Different types of meningiomas: UHC Ibn Rushd 1990 - 2010



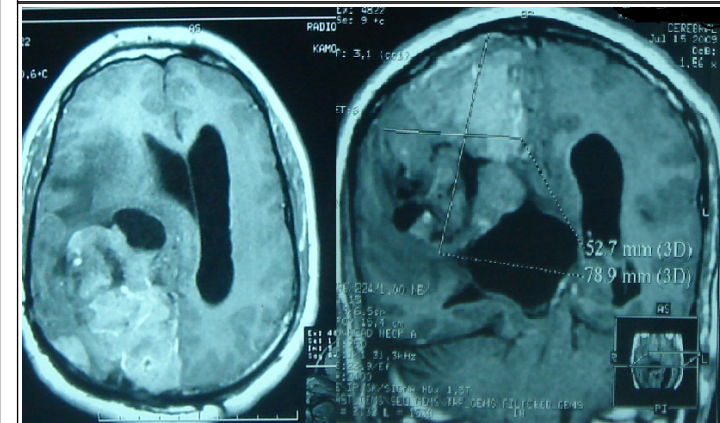
CT brain scan: right parietal heterogeneous process with cystic areas and calcifications surrounded by perilesional edema



CT brain scan: left parieto-frontal process, heterogeneous with areas of macrocalcifications.



MRI in coronal view with gadolinium: right frontal heterogeneous processes with cystic areas and a fleshy area enhanced by gado, with mass effect on the ipsilateral Ventricle



MRI in axial and frontal view with GADO: right parieto-occipital process with heterogeneous contrast enhancement and mass effect on the right VL : atypical meningioma