

# Case report:

# *Cystic meningioma*

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GREECE

# Identification / Chief complaint

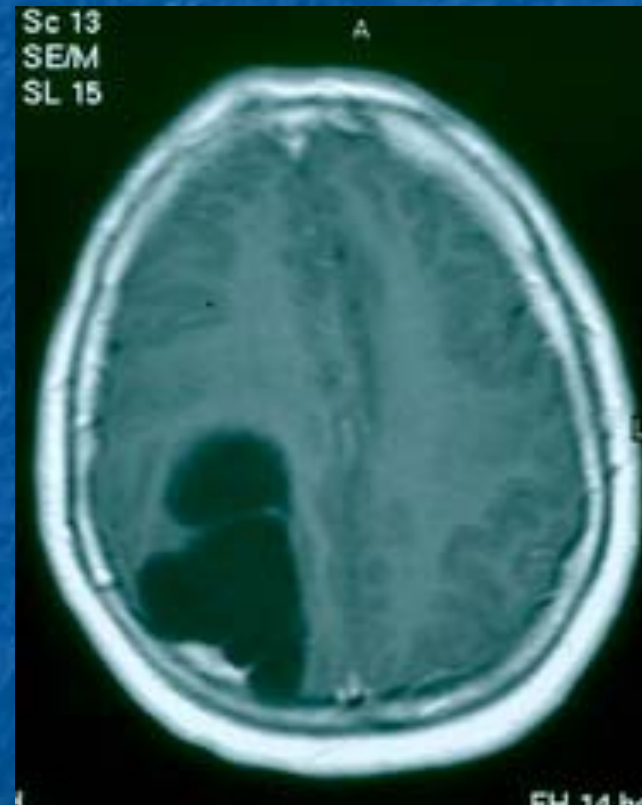
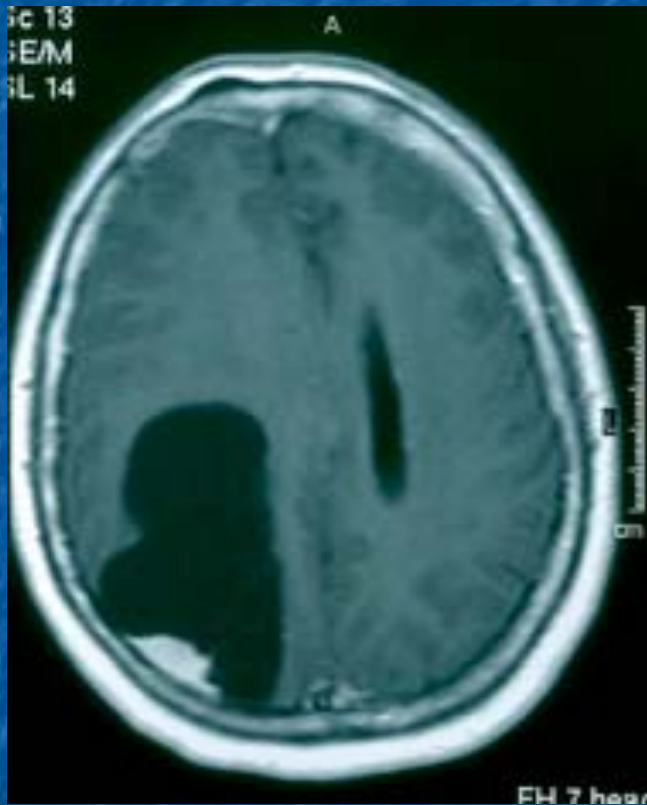
- A 57 years old female presented at the neurosurgical outpatient clinics
- Noted left hemiparesis and numbness of left upper extremity
- Recurrent episodes of headaches during the past 2 months, occurring mainly in the morning



# Physical examination

- Alert, full of consciousness patient, orientated in time and place
- Left spastic hemiparesis
- Left Babinski sign
- Impaired light touch and pin prick sensation in left upper and lower extremity accompanied with dysesthesia
- A head MRI scan was ordered...

# MRI scan



Cystic lesion 7.5 X 5.5 X 4.6 cm with an enhanced nodule part 2.4cm x 9mm with diaphragms

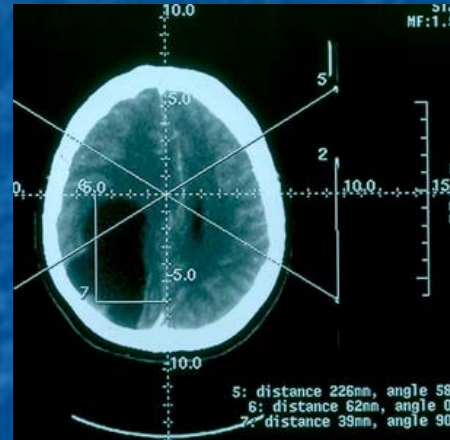


# Imaging DDx

A large cystic space occupying lesion located at the right parietal lobe with diaphragmatic formations and a nodule at the circumference, attached to the dura

- Cystic astrocytoma
- Atypic Hemangioblastoma
- Malignant glioma with cystic or necrotic change
- Parasitosis
- Cystic meningioma (type II)

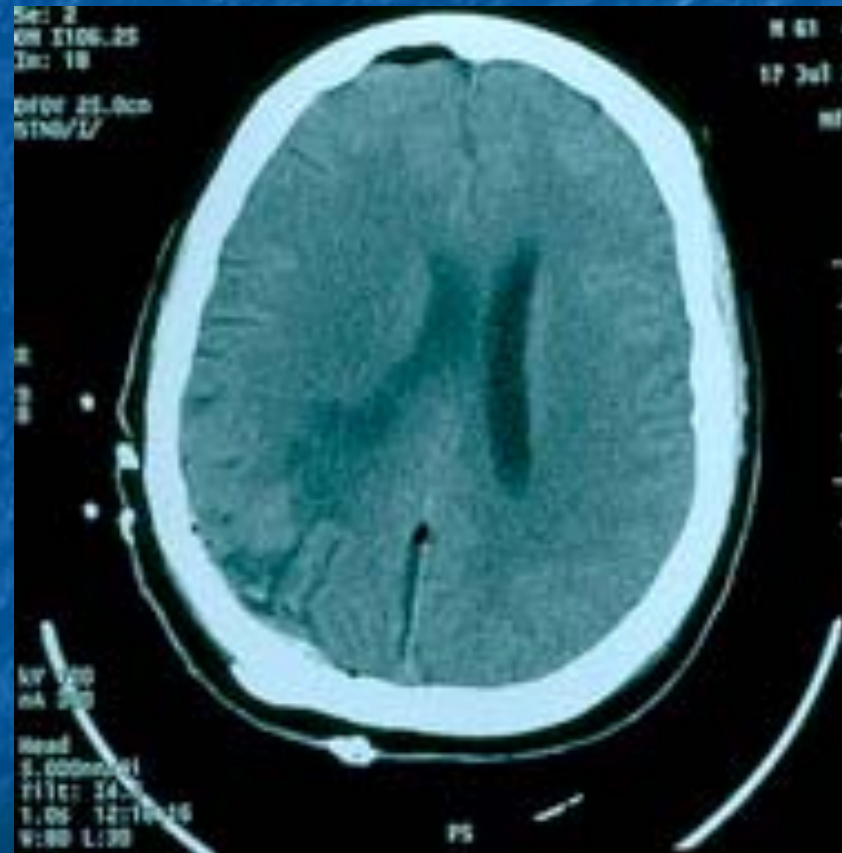
# Treatment plan



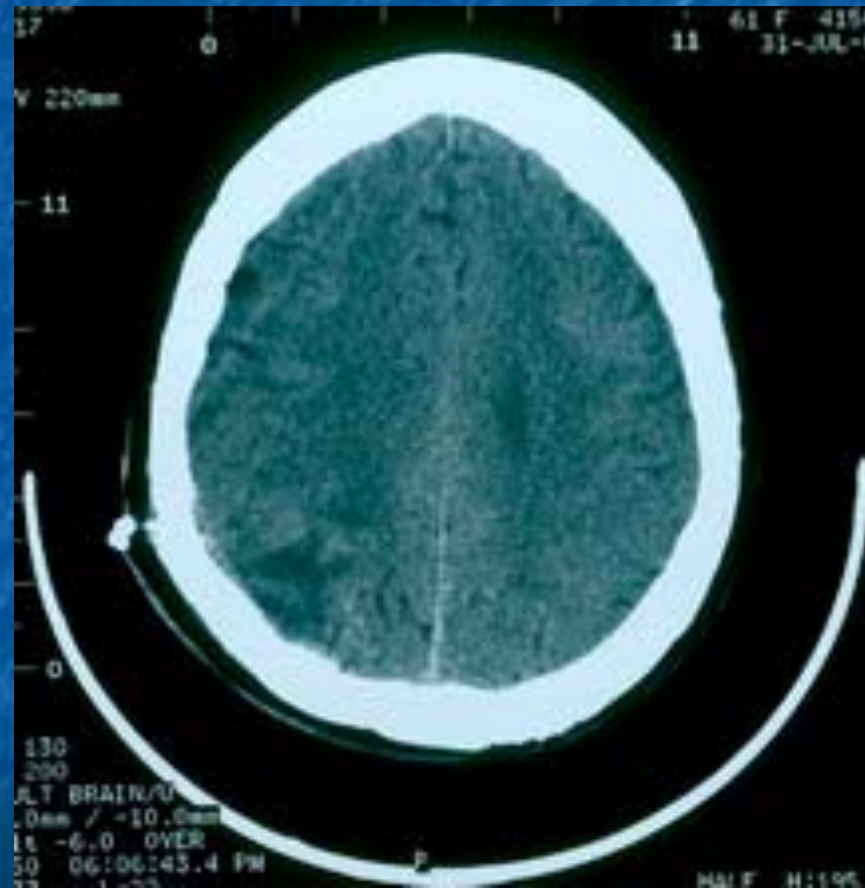
- Stereotactically aided small size right parietal craniotomy
- Exclusion of capsular formation of the cyst
- Microsurgical en block excision of the nodule, on a arachnoid plane
- Aspiration of the cystic content – cytology



# Day 1- postoperative CT



# Day 15- postoperative CT





# DISCUSSION - Epidemiology

- Cystic meningiomas are relatively rare (1,7-11,7% of all intracranial meningiomas)
- 129 adult cases reported 1994 till April 2007
- Most common is the meningothelial subtype

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WEBER J, GASSEL A, HOCH A, KILISEK L, SPRING A. Intraoperative management of cystic meningiomas. *Neurosurgical review* 2003;26:62-6

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# DISCUSSION - Categorization

- Nauta types I-III
  - Type I: central intratumoral cyst
  - Type II: peripheral intratumoral cyst
  - Type III: peritumoral cyst with walls consisting of both adjacent parenchyma and tumor and presents with signs of glial reaction
- Present case is of type II



# DISCUSSION - Theories

- Secretory or degenerative changes
  - May apply to intratumoral cysts (type I)
- Adjacent demyelination due to edema or perfusion deficits
  - May apply to peritumoral cysts (types II and III)
- Accumulation of many microcysts
- CSF entrapment

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