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PARASSAGITAL BRAIN TUMORS, WHO CLASSIFICATION 2000, AND SURGICAL, MICROSCOPIC CLASSIFICATION

Blerim Zeqiri[1], Mentor Petrela[2] , Gazmend Zeqiri[3]
*1**

**Corresponding Author: e-mail:blerim.zeqiri@unite.edu.mk*

Abstract

Introduction: Parasagital Brain tumors or meningiomas are globular and encapsulated tumors. Meningiomas attack dura and by exercising pressure on t Brain tissue without infiltrating it, exercising pressure on neighboring structures. Meningiomas, though involv dura or dural sinuses, can easily be prepared by the pia.
In meningioma we find mutations in TNF2 suppressor genes localized on chromosome 22q12.2. (1)
Purpose: The purpose of this paper is to get acquainted with the experience of the Service of Neurosurgery Clinic UCH "Mother Teresa", run by Prof.dr. Mentor Petrela (PU-PH Paris) in the treatment of parassagital meningiomas as well as our experience at Clinical Hospital Tetovo, in the treatment of parassagital meningiomas as well as our experience at Tetovo Clinical Hospital although it is very short as well as some cases of meningiomas nga from General Hospital 8 September Skopje. This is a result of the joint work carried out by Neurosurgery, Neuroanesthesia-Reanimation and Neuroradiology at these three clinics, and has come to the conclusion that wich type of Brain tumor we encounter most on our region.

Introduction

The World Health Organization (WHO) in 2000 has classified the tumor of the nervous system and classifies meningiomas as tumors of meninges. The classification describes three stages based on pathological criteria that present the risk of recurrence or rapid growth **(2)**.

Grade I
Meningothelial meningioma (most common in our areas) Fibroblastic meningioma
Mixoid meningioma
Psamomatous meningioma
Angiomatous meningioma
Mycrocistic meningioma
Ssecretory meningioma
Metaplasic meningioma

Grade II
Atypical meningioma
Clear cell meningioma
Chordoidal meningioma

Grade III
Rhabdoidal meningioma
Papilar meningioma
Anaplastic meningioma

Other variables (not WHO advocated)
Giant cell meningiomas
Meningioma with intracytoplasmic eosinophilic involvement
Sclrosis meningioma
Oncocytic meningioma

Sindou classification (2006) of meningioma invasion in relation with SSS (3,4)
1) The first type (I) -attack the external surface of the sinus wall, but without causing wall interruption or penetration inside the SSS.

2) The second type (II) -lesion attack the sinus, but without causing side wall cracks.

3) The third type (III) ipsilateral invasion of the sinus wall.

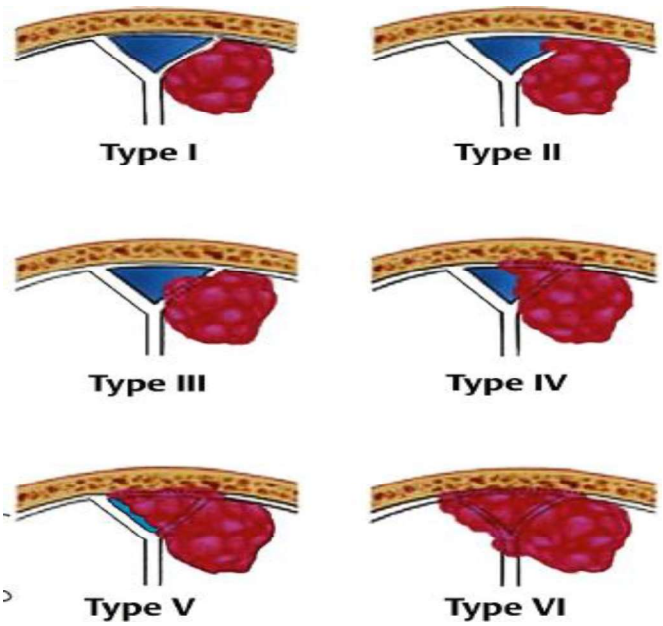
4) The fourth type (IV) -invaded two sides of the wall and the roof of the SSS.

5-6) The fifth and sixth (V-VI) - complet ocluded sinus with or without one side free wall.

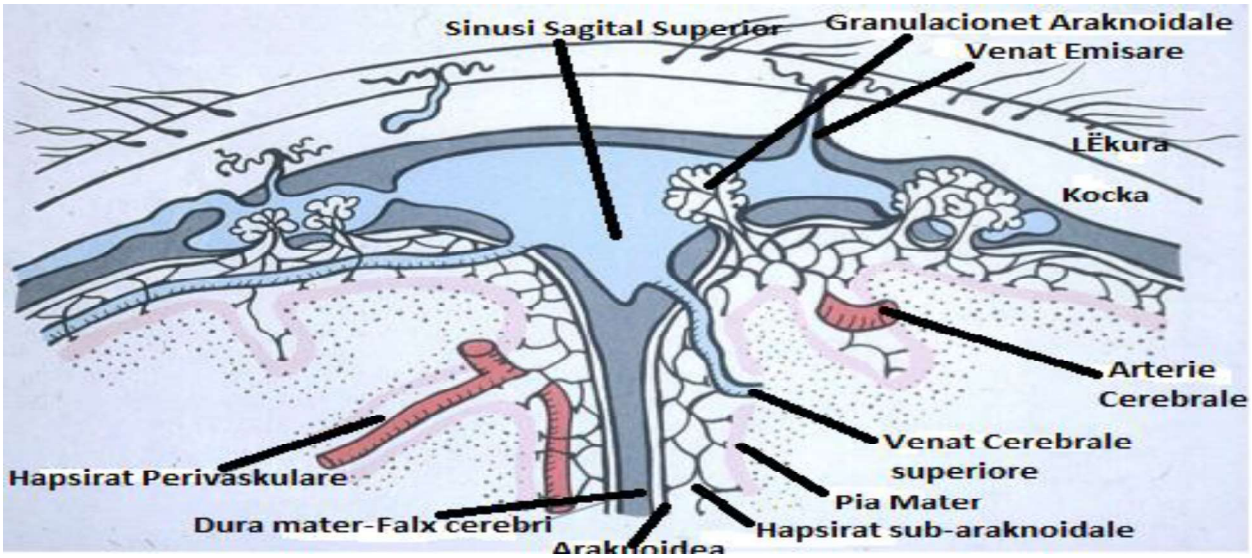
Kobayashi classification (microscopic) (5):

- I-Full microscopic removal of the tumor and the thigh as well as bones adherence that even it may be abnormal.
- II - Full microscopic removal of the tumor with diathermic coagulation of its attachment with the dura.
- IIIA- Full microscopic removal of intradural and extradural tumor without resection or coagulation of its dural attachment.
- IIIB - Complete microscopic removal of intradural tumor without resection or coagulation of its dural attachment or of any extradural extension.
- IVA - Sub - tota lremoval to maintain cranial nerves or blood vessels as well as complete microscopic removal and connectivity with the dura.
- IVB- Partial removal of TU, leaving <10% in tumor mass volume.
- V - Partial removal of TU, leaving tumor > 10% in tumor mass volume, or decompression with or without biopsy.

These types of classifications are still used today, different schools tend to use the Simpson classification although slightly outdated, but has been shown to be the most practical in the Neurosurgeons language.



Anatomical Structure of SSS
Frontal incision of calvary and meninges



Simpson Classification (Microsurgical) (6):
• Grade I Total tumor remove along with the infiltrated dura or bone,
• Grade II Total tumor remove and coagulation of infiltrated dura,
• Grade III Total tumor remove without coagulation of the infiltrated dura,
• Grad IV Subtotal tumor removal,
• Grade V Intracapsular tumor decompression

Material and methods:

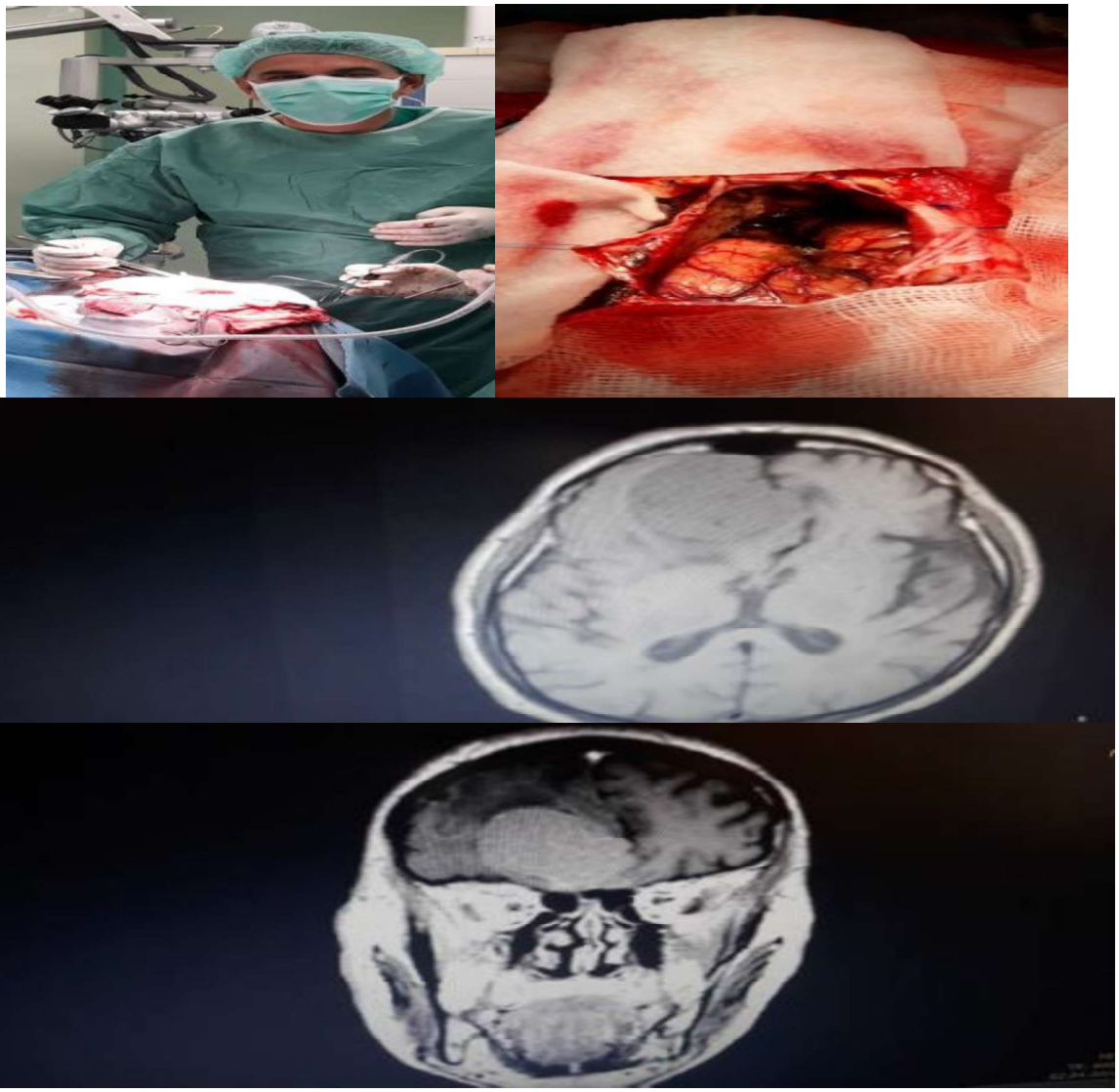
The data for this case was taken by Generl Hospital 8 September Skopje on 29.05.2018
In our work we have divided the diagnoses associated with headaches, epilepsy, neurological deficit.

R 51, G40, G81

Conclusion

Parasagittal brain tumors, in our new experience, it is shown that the tumor if it reports with the sinus sagittalis supperior is always present, and according to the above classifications it results that MENINGOTHELIAL MENIGIOMA is more frequent.

Immages during the surgical remove of TU in SSS on dt.29.05.2018 (7)



References:

1. Collins VP, Nordenskjold M, Dumanski JP. The molecular genetics of meningiomas. Brain Pathol 1990;1:19–24.
2. Modified from Louis DN, Scheithauer BW, Budka H, et al. Meningiomas. In: Kleihues P, Cavenee WK, eds. Pathology and Genetics of Tumours of the Nervous System. Lyon, France: IARC Press; 2000:176-180
3. Alvernia JE, Sindou M. Parasagittal meningiomas. In: Lee JH, ed. Meningiomas: Diagnosis, Treatment, and Outcome. London: Springer; 2009:309–317.
4. Sindou MP, Alvernia JE. Results of attempted radical tumor removal and venous repair in 100 consecutive meningiomas involving the major dural sinuses. J Neurosurg 2006;105(4):514–525
5. Kobayashi K, Okudera H, Tanaka Y. Surgical considerations on skull base meningioma. Paper presented at: First International Skull Base Congress; June 18, 1992; Hanover, Germany
6. Simpson D. The recurrence of intracranial meningiomas after surgical treatment. J Neurol Neurosurg Psychiatry. 1957;20:22-39
7. Immages during the surgical remove of TU in SSS on dt.29.05.2018. General Hospital 6 september Skopje. Macedonia.