PSYCHIATRIC DIAGNOSIS IN CEREBRAL GLIOMA PATIENTS

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Introduction

The presence of psychiatric disorders in patients with glioma is poorly defined and findings are contradictory in distribution by age, gender, type of lesion and location.

Aims

To know the frequency of psychiatric disorders diagnosed in patients with glioma and to analyze their relationship with socio-demographic and clinical characteristics.

Methods

Review of the medical records of patients consecutively admitted at Hospital del Mar between 2008 and 2011 with a diagnosis of glioma. Data were collected from the variables age, sex, tumor location, histological grade of tumor and psychiatric disorder coded according to CIE9 CM (Table 1)

Table 1: Sociodemogrphic and clinical variables (N:113)

	n (%)	Mean (SD)
Age (20-89)		57.4 (15.9)
Gender		
male	61 (53.9)	
female	52 (46.1)	
Location		
frontal	45 (39.8)	
temporal	39 (34.5)	
parietal	19 (16.8)	
others	10 (8.8)	
Side		
left	63 (55.7)	
right	47 (41.9)	
both	3 (2.6)	
Glioma grade		
I-II	32 (28.3)	
III-IV	81 (71.7)	
Any psychiatric diagnosis	43 (38)	
affective		
organic psychosis	13	
non-psychotic org disorder	12	
substance use disorder	2	

Results

From a total of 113 patients (59.2% men) with a mean age of 57 years (20-89), 43 (38%) had a psychiatric diagnosis. The presence or absence of a psychiatric diagnosis was independent of age, sex or histological grade of the tumor. A higher frequency of psychiatric disorders was observed in patients with tumor localization in the left hemisphere without reaching statistical significance (p = 0.096) (Table2).
Of 43 patients with psychiatric diagnosis, 16 (37%) had an affective spectrum disorder; 13 (30.2%) organic psychosis; 12 (27%) non-psychotic organic disorder; and 2 (4.6%) substance use disorder (Table 2).
In 34 (30%) of patients the psychiatric disorder was presented in temporal relationship to the diagnosis of brain tumor (during the previous year or concomitantly). Women presented significantly more affective disorders (Table 3).

Table 2: Result

	Psychiatric diagnosis n(%) With	Without	*Fisher's Exact*
Gender			*0.440*
male	21 (48.84)	40 (57.14)	
female	22 (51.16)	30 (42.86)	
Age			*0.327*
<=50	12 (27.9)	23 (32.86)	
51-69	24 (55.8)	29 (42.43)	
<70	7 (16.2)	18 (25.71)	
Side			*0.096*
right	17 (39.5)	30 (42.86)	
left	23 (53.4)	40 (57.14)	
both	3 (6.9)	0	
Glioma grade			*0.201*
I-II	9 (20.9)	23 (32.86)	
III-IV	34 (79.07)	47 (67.14)	

Table 3: Psychiatric disorders n= 43

	Affective	Organic psychosis	Non-psychotic org	Substance use	*Fisher's Exact*
Gender					*0.011*
male	3	9	7	2	
female	13	4	5	0	
Diagnosis date => one year temporal relationship	7	0	0	2	*0.000*
	9	13	12	0	

Conclusions

The presence of psychiatric diagnosis in glioma patients is frequent and independent of age, sex or tumor grade. Tumors located in the left hemisphere appear to be at greater risk of presenting psychiatric disorders.
Disorders of the affective spectrum are the most frequent comorbidity and seems to have a significant relationship with female sex.

References

S. Madhusoodanan, MB. Ting, T. Farah, U. Ugur. Pychiatric aspects of brain tumors: A review. WJP 2015; 5 (3):273-285.
AG. Rooney, A. Carson, R. Grant. Depression in Cerebral Glioma Patients: A Systematic Review of Observational Studies. J Natl Cancer Inst 2011;103:61–76.

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