

Psychiatric comorbidities and psychopharmacological treatment in patients with drug-resistant epilepsy in an Epilepsy Unit in Barcelona

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Introduction

Drug-resistant epilepsy (DRE) is defined as failure of adequate trials of two tolerated and appropriately chosen antiepileptic drug schedules to achieve sustained seizure freedom[1] and affects approximately 30% of patients with epilepsy[2]. Treatment of DRE is complex as it must not only focus on achieving seizure-freedom, but also on the managing psychiatric comorbidities, among other frequent complications[3].

Aim

To describe the psychopharmacological treatment profile of a sample of patients with DRE from the Epilepsy Unit in Hospital Clinic in Barcelona during a 9-year period. A second objective is to examine whether a relationship exists between localization of epileptic focus and both psychopathology and psychopharmacological treatment.

Material and methods

Retrospective study of 453 patients diagnosed with DRE from the Epilepsy Unit of Hospital Clinic from 2008 to 2016. The following variables were analyzed: age, sex, locus, presence of axis I disorders (applying the Spanish adaptation of the Structured Clinical Interview for DSM-IV-TR –SCID I- following a structured clinical interview) and psychopharmacological treatment.

Analyses were performed using SPSS Statistics. To compare clinical features between locus and both presence of axis I disorders and psychopharmacological drugs a post hoc analysis was conducted, using Z-test for independent proportions to compare categorical variables. Bonferroni corrections were used to adjust confidence intervals and significance values at a level of $p < 0.05$.

Results

On average, the mean age of the 453 patients was 36.9 ± 12.3 years, ranking from 14 to 75. A slight majority of patients were women (257; 56.7%) and in most cases the locus was temporal (225, 49.6%). An axis I disorder was present in 39.8% of the sample, being depression, anxiety and adjustment disorders the most frequent ones. From the 145 patients (32.1%) taking psychopharmacological medication, the most common medication were antidepressants (19.2%). Demographic and clinical characteristics are shown in [table 1](#).

No statistically significant association was found between locus and psychiatric comorbidity. Moreover, despite the proportion of patients taking psychopharmacological medication was higher for extratemporal epilepsy (35.5%) than for temporal (24.9%), no statistically significant difference was found with regard to the association between both variables ($p > 0.05$).

Conclusion

The results from our sample reveal a high percentage of patients with DRE who present psychiatric comorbidity. It implies an important concern, has great impact on quality of life and may often remain undertreated [4]. This fact may be illustrated in our sample when comparing the percentage of patients with psychiatric diagnoses (40%) with the percentage of patients under psychopharmacological treatment (25.2%).

In our sample, no association was found between psychiatric comorbidity and locus. This is in congruence with previous studies which have shown no significant differences in prevalence of psychiatric disorders between temporal and extratemporal lobe epilepsy [5]. Furthermore, apart from the fact previously stated regarding possible undertreatment of psychiatric comorbidity [4], little is known on the relationship between locus and psychopharmacologic medication in DRE. According to the results from our sample an association cannot be established. However, further investigation is required in order to provide more knowledge on this topic, with the objective of contributing to a complete and adequate management of these patients.

References

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Table 1. Clinical and sociodemographic characteristics

Variables	Results
Age (average)	36,9 years
Sex	
Men	196 (43.3%)
Women	257 (56.7%)
Localization of epileptic focus	
Temporal	225 (49.6%)
Extratemporal	130 (28.7%)
Not established	98 (21.7%)
Presence of axis I disorder	
No	273 (60.2%)
Yes	180 (39.8%)
Diagnostic categories	
Mood disorders	80 (17.7%)
Adjustment disorders	64 (14.2%)
Anxiety disorders	15 (3.3%)
Psychotic disorders	14 (3%)
Substance-related disorders	2 (0.5%)
Other disorders	5 (1.2%)
Taking psychopharmacological drugs	
No	308 (67.9%)
Yes	145 (32.1%)
Types of psychopharmacological drugs	
Antidepressants	87 (19.2%)
Mood stabilizers	43 (9.5%)
Antipsychotics	15 (3.4%)

