PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

COMPETING INTERESTS

The authors have declared that no competing interests exist.

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Benzodiazepine Use in Portugal: Revisiting the Stars of Liège Model

Uso de Benzodiazepinas em Portugal: Revisitando o Modelo das Estrelas de Liège

Keywords: Benzodiazepines; Portugal
Palavras-chave: Benzodiazepinas; Portugal

Dear Editor,

We read a recent article in your journal regarding the use of benzodiazepines in Portugal.[1] According to the authors, only eleven different benzodiazepine types were prescribed to patients.

We were surprised that not a single patient was being prescribed with any of the other nine types of benzodiazepines which are still commercially available in Portugal.[2] We also wondered about the other five types of benzodiazepines which have been withdrawn from the market in Portugal.[3] It is not clear how the authors excluded the present and past abuse of these particular substances. We were also surprised to see that patients had not carried out urine or blood tests to confirm the drug use. What a patient tells us in a questionnaire is always some kind of subjective information that should, whenever possible, be cross-checked with objective information.

The article discussion missed the important issue of the LOT benzodiazepines: lorazepam, oxazepam and temazepam. Another useful mnemonic for these molecules would be OTL: other than liver. These three drugs have no active metabolites after hepatic conjugation, and therefore present minimally affected half-lives in patients with liver disease,[4] e.g., hepatic cirrhosis due to alcohol and/or chronic viral infection.

Last, but not least, we would like to remind the stars of Liège model,[5] which has been used for decades for the purposes of psychopharmacological comparison among the different types of benzodiazepines. We recently adapted this classic visual model where each of the five arms of a pentagram star corresponds to a different psychopharmacological characteristic, e.g., somatic anxiolytic, psychic anxiolytic, antiepileptic, myorelaxant and hypnotic (Fig. 1). With this zero (null) to five (very powerful) scale, clinical researchers are thus able to classify any benzodiazepine with an intrinsically unique signature. Although we were quite disappointed for not finding a citation of this model in the aforementioned article, we would like to share it with the readers, hoping that it will help them in their clinical practice.

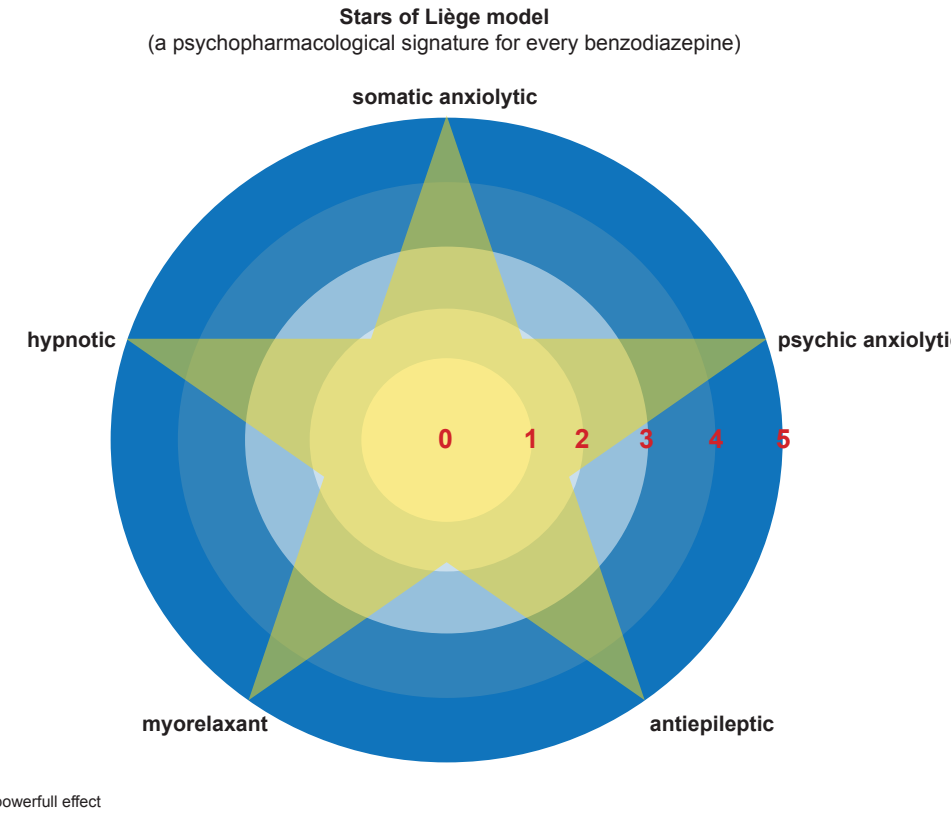

Figure 1 – Stars of Liège model: a psychopharmacological signature for every benzodiazepine
(adapted from Cloos and Bocquet, 2013)

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