

<sup>h</sup> Servicio de Psiquiatría, Hospital General Universitario

Gregorio Marañón, Madrid, Spain

<sup>i</sup> Hospital Psiquiátrico de Zamudio, Red de Salud Mental de Bizkaia, Bilbao, Vizcaya, Spain

<sup>j</sup> Junta Directiva de la Sociedad Española de Residentes de Psiquiatría (SERP), Spain

\* Corresponding author.

E-mail address: [victorpsanchez@gmail.com](mailto:victorpsanchez@gmail.com)

(V. Pereira Sánchez).

2173-5050/

© 2016 SEP y SEPB. Published by Elsevier España, S.L.U. All rights reserved.

## Are we considering the QTc interval of our patients?\*



## ¿Estamos considerando el intervalo QTc de nuestros pacientes?

To the Editor,

Long QT syndrome (LQTS) is a heart alteration caused by a lengthening of the repolarization phase of the ventricular action potential.<sup>1</sup> Prolonged QT interval corrected for heart rate (QTc) has been shown to be a prognostic indicator for the development of a special form of malignant ventricular tachyarrhythmia (torsades de pointes or point torsion), which involves risk of sudden death.<sup>2</sup> There is no single cut-off point from which the appearance of risk of cardiovascular events is clear; however, values above 450–500 ms are considered as high risk for such events.<sup>2–4</sup>

We know that several psychoactive agents (antipsychotic drugs, antidepressants and lithium) produce prolongation of QTc. Some of these, such as tricyclic antidepressants, do so as a class effect,<sup>1,3</sup> while others, such as intravenous haloperidol, are known due to very extensive documentation. We also know that specific clinical-epidemiological characteristics act as factors of risk for this prolongation (advanced age, female sex, polypharmacy).<sup>5</sup>

What is true is that in the case of citalopram and escitalopram, the alerts published by regulatory agencies in 2011 caused some alarm (perhaps to an excessive degree) that could lead to prescription attitudes closer to that of defensive medicine, as was indicated in the special article, "Citalopram, escitalopram and long QT: Alert or alarm?"; and it seems only sensible (and is sufficiently based on the evidence) to limit the alarm with both drugs to patients with a history of seizures or to cases of poisoning, with the article authors recommending the need for an electrocardiogram (ECG) only for patients of advanced age.<sup>1</sup> We consider the URL indicated in that same article, linked to the American Medical Association, which keeps an up-to-date list by risk groups with respect to the ability of all drugs to prolong QT: <http://www.acert.org/medical-pros/drug-lists/drug-lists.cfm>.

Other authors believe that performing an ECG before and after administering any psychoactive drug that can lengthen this interval (monitoring the QTc interval) is a recommendation that might be considered beneficial in general terms, independently of other factors such as patient age.<sup>2,5</sup> The World Health Organisation sets a similar position, as a recommendation, with respect to the use of antipsychotic drugs, indicating that in some countries this recommendation becomes obligatory (as in the case of haloperidol), having an impact on recording family history of sudden death and personal, non-familial history of seizures.<sup>6</sup>

We authors consequently believe that it is essential to carry out this control measure in the case of drugs such as intravenous haloperidol and sertindole. Furthermore, we feel that it is useful to reflect upon the use of the technical procedures that we have available (in this case, performing an ECG in other clinical situations that involve drugs that prolong the QTc interval) as an indispensable task required by ethics, following on from the recent remarks by Lolas-Stepke published in the same journal.<sup>7</sup> This is especially so considering how attainable, humane and accessible it is to perform an electrocardiogram, with it even being feasible to coordinate with primary healthcare to do so, a coordination that we also understand facilitates joint assumption of healthcare responsibilities to the benefit of the shared objective: efficient and comprehensive healthcare for the patient.

## Reference

- Álvarez E, Vieira S, García-Moll X. Citalopram, escitalopram y QT largo: ¿alerta o alarma? Rev Psiquiatr Salud Ment. 2014;7: 147–50.
- Araujo A, Curbelo A, Pardiñas F, Romano S. Implicancias de la medición del intervalo QTc como estudio de rutina en la práctica psiquiátrica. Rev Psiquiatr Uruguay. 2012;76:11–24.
- Van Noord C, Straus SM, Sturkenboom MC, Hofman A, Aarnoudse AJ, Bagnardi V, et al. Psychotropic drugs associated with corrected QT interval prolongation. J Clin Psychopharmacol. 2009;29:9–15.
- Herrero-Hernández R, Cidoncha-Gallego M, Herrero-de Lucas E, Jiménez-Lendínez M. Haloperidol por vía intravenosa y torsade de pointes. Med Intensiva. 2004;28:89.
- Al-Khatib SM, LaPointe NM, Kramer JM, Califf RM. What clinicians should know about the QT interval. JAMA. 2003;289: 2120–7.
- Medicamentos utilizados en los trastornos psicóticos. Organización Panamericana de la Salud. Tratamiento farmacológico de los trastornos mentales en la atención primaria de salud. Washington, DC: OPS, 2010. p. 9.
- Lolas-Stepke F. Trends and clinical need of ethical principles. Rev Psiquiatr Salud Ment. 2015;8:1–2.

\* Please cite this article as: Muquebil Ali Al Shaban Rodríguez OW, Ocio León S, Hernández González MJ, Gómez Simón M, Tuñón Gorgojo L. ¿Estamos considerando el intervalo QTc de nuestros pacientes? Rev Psiquiatr Salud Ment (Barc). 2017;10:64–65.

Omar Walid Muquebil Ali Al Shaban Rodríguez\*,  
Sergio Ocio León, Mario Javier Hernández González,  
Manuel Gómez Simón, Lorena Tuñón Gorgojo  
*Centro de Salud Mental de Mieres, Mieres del Camino,  
Asturias, Spain*

\* Corresponding author.  
E-mail address: [muquebilrodriguez@gmail.com](mailto:muquebilrodriguez@gmail.com)

(O.W. Muquebil Ali Al Shaban Rodríguez).

2173-5050/

© 2016 SEP y SEPB. Published by Elsevier España, S.L.U. All rights reserved.