Inhaled loxapine for agitation in patients with personality disorder: a case series

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Background and aims

Agitation is common among patients diagnosed with personality disorders, especially those with impulsivity-related personality traits. There is a need for treatments in agitation, with a good safety profile and low drug interactions, with fast onset but enough duration of action, easy to administer, and nontraumatic. As new alternative, inhaled loxapine has demonstrated to reduce agitation mainly in patients with schizophrenia or bipolar disorder (Allen et al., 2011). In fact, in December 2012 this inhaled version was approved by the U.S. FDA in this kind of patients, but data on its use in personality disorder are lacking (Kahl et al., 2015; Puente et al., 2016). Inhaled loxapine is rapid, effective, and well accepted in all patients presenting with acute agitation and facilites the cooperation of the patient and an adequate management of the disease (Roncero et al., 2016).

Methods

We developed a naturalistic, prospective study approved by The Hospital Ethics Committee and registered at the Spanish Clinical Studies Registry (EuraCT 2016-004884-38). Twenty three patients with PD diagnosis (according to DSM-5 criteria) were recruited. The following variables and tools measured efficacy and safety:
- Evaluation with CGI-Scale, PANSS-EC and ACES scale.

The symptoms were measured at 20 and 60 minutes after administration. Safety was assessed by a list of side effects.

Results

These are the preliminary results with 23 patients from an expected final sample of 30. Eighteen people with agitation were diagnosed with Borderline PD and three with Antisocial PD. The baseline total scores for CGI-S, PANSS-EC and ACES scales were 5, 23 and 2, respectively. At 20 minutes, both CGI-S and PANSS-EC scores decreased in more than 55% and the ACES score improved in 50% . At 60 minutes, CGI-S and PANSS-EC scores decreased 100% and 74%, respectively, and the ACES score improved in 62%. No patient needed pharmacological reintervention with loxapine, or used mechanical restraint, only one patient needed another drug to reduce agitation. No significant side effects were observed.

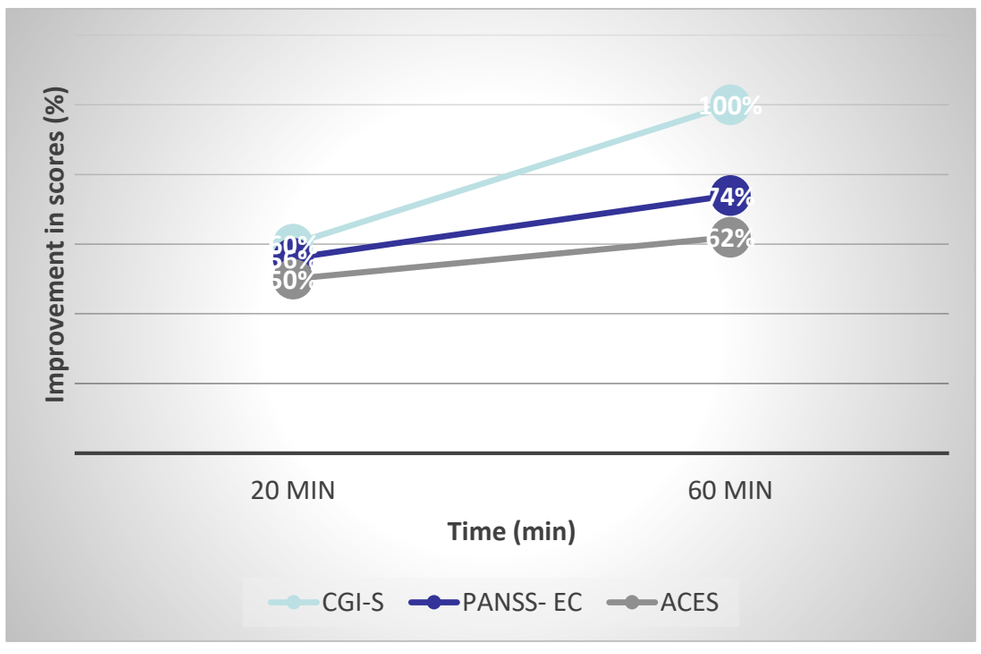

Figure 1. shows mean improvement of agitation scales 20 and 60 minutes after inhaled loxapine was administered

Conclusions

According to these preliminary results, inhaled loxapine could be a useful and safe option for managing agitation in PD patients

Discussion

Loxapine has gathered some evidence regarding its usefulness for agitation in patients with several mental health disorders, but the evidence in PD is scarce. This study shows it might prove to be a good alternative for managing agitation in these patients in a rapid, effective way. However, randomized controlled trials comparing its use vs other methods such as second generation antipsychotics or benzodiazepins are needed.

Since our study didn't show any of the potential side effects, a new one with a bigger number of subject aiming to asess its security could also be useful.

Sources

Allen, M. H., Feifel, D., Lesem, M. D., Zimbroff, D. L., Ross, R., Munzar, P., … Cassella, J. V. (2011). Efficacy and safety of loxapine for inhalation in the treatment of agitation in patients with schizophrenia: A randomized, double-blind, placebo-controlled trial. *Journal of Clinical Psychiatry*, *72*(10), 1313–1321. https://doi.org/10.4088/JCP.10m06011yel

Kahl, K. G., Negt, P., Wollmer, A., Jung, S., & Kruger, T. H. C. (2015, November 3). Inhaled loxapine for acute treatment of agitation in patients with borderline personality disorder a case series. *Journal of Clinical Psychopharmacology*. Lippincott Williams and Wilkins. https://doi.org/10.1097/JCP.0000000000000402

Puente, R., Rabito Alcon, M., Garcìa Jorge, S., Dolengevich Segal, H., Benítez Alonso, M., Gómez-Arnau Ramírez, J., … Correas Lauffer, J. (2016). Inhaled loxapine for the treatment of agitation in borderline personality disorder. *European Psychiatry*, *33*, S444–S445. https://doi.org/10.1016/j.eurpsy.2016.01.1617

Roncero, C., Ros-Cucurull, E., Grau-Lopez, L., et al. (2016). Effectiveness of inhaled loxapine in dual-diagnosis patients: A case series. *Clinical Neuropharmacology*, *39*(4), 206–209. https://doi.org/10.1097/WNF.0000000000000153