

Empirical and targeted therapy of candidemia with fluconazole versus echinocandins: a propensity score-derived analysis of a population-based, multicentre prospective cohort

Luis Eduardo López-Cortés, Benito Almirante, Manuel Cuenca-Estrella, José Garnacho-Montero, Belén Padilla, Mireia Puig-Asensio, Isabel Ruiz-Camps, Jesús Rodríguez-Baño on behalf of the members of the CANDIPOP Project from GEIH-GEMICOMED (SEIMC) and REIPI¹

¹Members of the CANDIPOP Project are listed in the Acknowledgements section.

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Objectives

The main objective of the analysis was to compare the clinical efficacy of fluconazole and echinocandins in the treatment of candidemia in real practice.

Methods

The CANDIPOP study is a prospective, population-based cohort study on candidemia carried out between May 2010 and April 2011 in 29 Spanish hospitals. Using strict inclusion criteria, we separately compared the impact of empirical and targeted therapy with fluconazole or echinocandins on 30-day mortality. Cox regression including a propensity score (PS) for receiving echinocandins, stratified analysis on the PS quartiles, and PS-based matched analyses were performed.

Results

The empirical and targeted therapy cohorts (ETC and TTC) included 316 and 421 cases, respectively; 30-day mortality was 18.7% with fluconazole and 33.9% with echinocandins (p 0.02) in the ETC, and 19.8% with fluconazole and 27.7% with echinocandins (p 0.06) in the TTC. Multivariate Cox regression analysis including PS showed that empirical therapy with fluconazole was associated with better prognosis (adjusted hazard ratio [aHR] 0.38; 95% CI 0.17-0.81; p 0.01); no differences were found within each PS quartile or in cases matched according to PS. Targeted therapy with fluconazole did not show a significant association with mortality in the Cox regression analysis (aHR 0.77; 95% CI: 0.41-1.46; p 0.63), in the PS quartiles, or in PS-matched cases. The results were similar among patients with severe sepsis and septic shock.

Conclusion

Empirical or targeted treatment with fluconazole was not associated with increased 30-day mortality compared to echinocandins among adults with candidemia.