

EV0766

ePoster Viewing

Diagnostic mycology (incl molecular)

Evaluation of quality control SEIMC results for diagnosis of *Candida dubliniensis* infection

Nieves Orta¹, Reme Guna², Rafael Medina², Enrique Ruiz de Gopegui², Jose Luis Pérez², Concepción Gimeno Cardona^{*2}

¹*Control de Calidad Seimc, Microbiology, Valencia, Spain*

²*Control de Calidad Seimc, Madrid, Spain*

Background: To evaluate the results obtained in two different shipments of the External Quality Control Program SEIMC (Spanish Society of Infectious Diseases and Clinical Microbiology) for the identification and susceptibility testing of *Candida dubliniensis*.

Material/methods: In 2004 and 2009 two shipments of the same strain, identified as *C. dubliniensis* by the reference laboratory to an average of 230 laboratories (Ref. M-2/04 and M-1/09) were performed. The results obtained regarding the identification in both controls are compared.

Results: The participation rate was high in both years (90.6% and 91.1%, respectively), while the percentage of correct identification (*C. dubliniensis*) was only 43.1% in 2004 and 65.3% in 2009, lower percentages due to the similarity with *Candida albicans*. Thus, in 2004, 53.1% confused with *C. albicans* strain, and 32.0% in 2009. Not all the commercial systems used on the identification of the yeasts offered satisfactory results; in 2004 the percentages of success in identification were as follows: with biochemical gallery 20C® API (bioMérieux) of 44.4%, with ID32C® API (bioMérieux) of 73.7%, with Vitek / Vitek system 2® (bioMérieux) of 51.5%, with Auxacolor® (BioRad) gallery of 66.7%, and the MicroScan® (Beckman Coulter) any valid response (0%). The percentages of success in the shipment M-1/09 were 60.8% with 20C® API, 61.5% ID32C® API, 93.1% with Vitek / Vitek2®, 92.9 with Auxacolor®, and only 14.3% with MicroScan® (Beckman Coulter) equipment. In almost all the cases that the yeast was not properly identified, it was informed as *C. albicans*.

Conclusions: The participation rate was high in both controls, while the correct identification rate was significantly lower, although an improvement was noted over the years. Regarding the confusion with *C. albicans*, it was evident in the results, because in 2004 more than half of the participants got it wrong (53%) versus 32% in 2009. These data revealed the limitations of commercial systems for identification some species, obtaining better results with Vitek / Vitek 2 Auxacolor and the API ID 32C gallery. The Program SEIMC External Quality Control may play an important role in improving results, thanks to the training which involved repeatedly face the same isolation, contributing to the quality of the results and the continued formation of participants.