Increasing candidemia incidence from 2004 to 2015 with a shift in epidemiology in patients pre-exposed to antifungals. [1]

Peer reviewed scientific article

English

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Keywords

1. Antifungal Agents [9]
2. Candida spp. [10]
4. epidemiology [12]
5. incidence [13]

Abstract:

BACKGROUND: Candidemia is an important health problem in immunocompromised patients with an epidemiology varying with region, period and patient population involved. OBJECTIVES: The occurrence of candidemia and the associated species distribution over a 12-year period at a large tertiary care centre in Belgium were analysed. The trend in incidence in the intensive care units (ICUs) and non-ICUs was investigated as well as the influence of antifungal exposure on the species distribution. PATIENTS/METHODS: Candidemia incidence was expressed per 10,000 patient days (PD). Epidemiological …

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OBJECTIVES: The occurrence of candidemia and the associated species distribution over a 12-year period at a large tertiary care centre in Belgium were analysed. The trend in incidence in the intensive care units (ICUs) and non-ICUs was investigated as well as the influence of antifungal exposure on the species distribution.

PATIENTS/METHODS: Candidemia incidence was expressed per 10,000 patient days (PD). Epidemiological parameters and antifungal consumption data were extracted from the hospital database and delivered by the hospital pharmacy, respectively.

RESULTS: From 2004 until 2015, 865 candidemia episodes occurred in 826 patients at the University Hospitals Leuven. Candida albicans (59%) remained the most important cause of candidemia, followed by C. glabrata (22.4%) and C. parapsilosis (8%). The mean incidence in the whole hospital was 1.48 per 10,000 PD. The incidence in ICUs increased reaching up to 10.7 per 10,000 PD whereas in the non-ICUs, the incidence decreased. Prior exposure to fluconazole and echinocandins was associated with candidemia caused by less susceptible species.

CONCLUSIONS: Candidemia incidence increased in the whole hospital, driven by ICUs. Surveillance of candidemia epidemiology on a local scale is of high value to guide empirical treatment strategies. This article is protected by copyright. All rights reserved.