EP076

ePoster Session

Fungal epidemiology today

"TriReg – a Europe-wide study of trichosporonosis"

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Background

The incidence of invasive fungal infections is increasing in all parts of the world. Less common emerging fungal pathogens account for significant numbers of these invasive infections. Invasive trichosporonosis is one example of an emerging fungal pathogen. To date, the epidemiology is largely unknown and current treatment recommendations cannot be considered evidence based. For this orphan disease, significant numbers of cases for systematic analysis cannot be collected in one center alone. Therefore, "TriReg – A Europe-wide Study of Trichosporonosis" has been launched as an ECMM (European Confederation of Medical Mycology) Working Group in April 2013. The objective of the study is to overcome the lack of knowledge on invasive trichosporonosis in order to develop evidence-based recommendations for diagnosis and treatment.

Methods TriReg uses web-based data capture via www.ecmm.eu. For case enrolment, cultural, histological, or molecular evidence of invasive trichosporonosis is required. In addition to demographic and clinical data, isolates are collected and formal identification by morphology and molecular tools and susceptibility testing using EUCAST and E-Test are performed.

Results

In total 33 cases of invasive trichosporonosis were documented from nine countries. Eighteen patients underwent chemotherapy. Other risk factors were solid organ transplantation (n=4), stem cell transplantation (n=4), and abdominal surgery (n=3). Twelve patients were treated in the intensive care unit. Seventy five percent of the patients experienced disseminated infection documented by positive blood cultures in all cases but one. Outcome was poor with a median survival time of 9 days (range from 1 to 90 days) and an overall mortality rate of 61%. Eighty four percent of the deaths were attributable to the fungal infection.

Conclusion

Invasive trichosporonosis is a rare disease with a very poor prognosis. A joint international effort is required to advance the knowledge on this orphan disease, in order to improve patient care. TriReg provides a platform to achieve this goal, and new contributors are invited to participate.