Adequacy of systematic antifungal agents prescriptions in a teaching hospital

J02 – Antimycotics for systematic use
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Background
Invasive fungal infections (IFI) have an important morbidity and mortality and their incidence is constantly increasing for more than twenty years due to the increase of immunocompromised patients. The complex medical care (related to diagnostic difficulties), the expansive treatments and emerging antifungals resistances require an appropriate prescribing.

Aim
To assess the conformity of antifungal prescribing to local and international guidelines for the treatment of IFI in a teaching hospital and to compare with similar studies.

Materials and Methods

• A prospective study was performed between April and May of 2018
• In six wards (pediatric oncology, hematology, and intensive care units)

• A multidisciplinary group produced a grid for prescription compliance
• For each initiation of antifungals drugs

• In accordance with the local guidelines
• And international guidelines from ECIL and IDSA

Results

Patients
79 patients
for 87 prescriptions
Average age
50,8 years ± 20,
Sex ratio H/F
1,63
On average the patients
had 3 risk factors for IFI

Prescriptions

Units

Hematology
Chirurgical intensive care
Cardio thoracic intensive care
Medical intensive care
Paediatric oncology
Infectious diseases

Prescriptions conformity

Local guidelines
International guidelines

Prophylaxis (n=29) 72% 59%
Empirical (n=22) 64% 59%
Pre-emptive (n=14) 71% 71%
Targeted (n=22) 82% 77%

Global conformity:
72% with local guidelines
66% with international guidelines

Clinical evolution at the end hospitalisation

Improvement
Stable
Deterioration
Death

47%
28%
24%
1%

Conclusion

Few studies to date have assessed appropriate use of antifungals. In the studies published with a similar methodology, compliance with the international guidelines has been reported to be between 34% (1) and 58% (2).

A multidisciplinary antifungal group was implemented to curb IFI and to improve the use of antifungals.

In this context, guidelines were updated in the form of decision algorithms that, once adopted as a guide, should be able to improve practices (3).

References: