IFISTRATEGY: A SPANISH NATIONAL SURVEY ON STRATEGIES FOR MANAGEMENT OF INVASIVE FUNGAL INFECTION AND GUIDELINES APPLICATION IN HIGH RISK ONCO-HEMATOLOGICAL PATIENTS

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Background:
The use of antifungals in prophylaxis and the appearance of azole-resistant Aspergillus fumigatus have conditioned an epidemiological change that, together with the interactions of targeted therapies, has modified the management strategies of onco-hematological patients with invasive fungal infections (IFI).

Aims:
To know the strategies of clinicians in the management of IFI in onco-hematological patients and the role of guidelines and recommendations in decision making.

Methods:
Cross-sectional multicenter survey with hematology or infectious diseases specialists, belonging to Spanish hospitals and experienced in treating IFI. Data collection was carried out through an electronic platform in February 2022. The survey questionnaire consisted of 12 items.

Results:
Fifty-five experts from 31 hospitals completed the survey (64% hematologists, 78% of them for adult population; average experience: 21 years). Based on the latest epidemiological studies, 63% of participants indicated that there has been an increase in Aspergillus resistance to azoles. The possible coexistence of mixed infection (resistant/susceptible Aspergillus) was a concern to 100% of experts. For 75% of participants these resistances in onco-hematological patients are mainly of clinical origin, due to the routine use of prophylaxis. Only 5.5% stated that there were no azole resistant Aspergillus infections in this population. Regarding breakthrough IFI, 65% indicated an increase in the incidence of Mucorales and that proven IFI were usually resistant to previously administered antifungals. In case of persistent febrile neutropenia (5 days), 59% indicated that they would perform early treatment (even in presence of nonspecific or absence of lung infiltrates in CT-SCAN). In the case of suspected resistance in a patient being treated for aspergillosis, 82% of surveyed professionals would change the antifungal drug family to another broad-spectrum antifungal therapy (with one or two drugs). An 87% indicated that when the percentage of resistance of A. fumigatus against an azole is ≥10% (as per the IDSA and ECCMID guidelines), a change should be made in the choice of early treatment. Respect a possible interaction of targeted therapy drugs (midostaurin or venetoclax) with antifungal agents, 40% would use broad-spectrum azoles and 38% echinocandins as prophylaxis. In the case of using echinocandins and development of suspected breakthrough IFI, 67% would administer liposomal amphotericin B. For antifungals failing to reach levels during the first days and suspected invasive aspergillosis, the most appropriate strategy for 62% of experts would be to associate it to an antifungal from another family.
Summary/Conclusion:

The present study shows that a high percentage of clinicians implicated in the management of onco-hematological patients at high risk of IFI follows the recommendations of the national and international and guidelines. Most of the experts agree on: a) Early treatment is the best option in case of persistent febrile neutropenia (even in the presence of nonspecific or absence of lung infiltrate in CT-SCAN). b) If resistance of Aspergillus to azoles is suspected, switching to another broad-spectrum antifungal family would be the best option. c) Broad-spectrum azoles and echinocandin can be used as prophylaxis in patients receiving new targeted therapies. Liposomal amphotericin B was the preferred option after prophylaxis with echinocandins.