ANSWER TO PHOTO QUIZ (PAGE 94)

A RARE BUT LETHAL YEAST...

DIAGNOSIS

Our patient was diagnosed with a severe pulmonary infection with Saprochaete capitata (teleomorph: Magnusiomyces capitatus, previously called Geotrichum capitatum, Trichosporon capitatum or Blastoschizomyces capitatus), most probably due to his immunocompromised state (determination method: MALDITOF). We continued therapy with voriconazole. On the ICU he was initially supported with non-invasive ventilation, but eventually he had to be intubated and mechanically ventilated. Despite full ICU treatment his situation worsened, and he died in cardio-respiratory arrest.

Saprochaete capitata is a non-fermentative, non-encapsulated, urease-negative ascomycetous yeast. It is part of the normal microbiota of human skin and is frequently isolated from the sputum and the digestive tract of healthy people. It is a rare, but emerging yeast responsible for severe infections in patients with profound neutropenia in the haemato-oncology setting. The prognosis is poor with a mortality rate exceeding 50%.

Most cases of *Saprochaete capitata* infections have been diagnosed by means of blood cultures or cultures on BAL liquid. Galactomannan antigen enzyme-linked immunosorbent assay (GM-ELISA) is now widely used in the serological diagnosis of invasive *Aspergillosis* as an essential diagnostic method. As the serological G test (1,3-β-D-glucan), which detects 1,3-β-D-glucan as a component of the fungal wall and which is also applicable for early diagnosis of all fungal infections (especially *Candida* and *Aspergillus* and except for *Cryptococcus* and *Zygomycetes*), it can also be used for the diagnosis of other

fungal infections such as *Saprochaete capitata*. However, neither of these tests can determine the specific infectious species.³

Saprochaete capitata is considered intrinsically resistant to echinocandins, several breakthrough infections in neutropenic patients have been reported. Voriconazole exhibits a promising activity in vitro, and voriconazole and amphotericin B combination therapy has been suggested.

CONCLUSION

In case of severe illness in neutropenic patients, fungal infection should always be considered. *Saprochaete capitata* can play a role as an opportunist. Treatment with echinocandins is probably ineffective; therefore treatment with voriconazole (perhaps in combination with amphotericin B) is advised.

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