CENTRAL VENOUS CATHETER-ASSOCIATED FUNGEMIA DUE TO *RHODOTORULA MUCILAGINOSA* IN A PREMATURE INFANT

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Background

A few cases of *Rhodotorula mucilaginosa* fungemia have been reported in premature infants. We hereby present a case of central venous catheter (CVC)-associated fungemia due to *R.mucilaginosa* in a premature infant.

Case Presentation Summary

A male infant was born weighing 1,450 g at 31 weeks with cesarean section due to premature rupture of membranes. Therapy including ampicillin and gentamicin was initiated at birth. The patient had a CVC inserted on day 3 for administration of total parenteral nutrition. He developed signs of sepsis and necrotising enterocolitis on day 14, so

empiric treatment with vancomycin, meropenem and fluconazole was started. After a period of clinical improvement lasting ~2 weeks, the patient's clinical condition deteriorated again, and both peripheral and CVC blood cultures yielded yeasts. Blood culture drawn from the CVC demonstrated positive result 1 hour earlier than the peripheral culture, and the patient diagnosed to have CVC-associated fungemia. The strain was identified as *R. mucilaginosa* by API 20C AUX (Biomerieux, Marcy l'Etoile, France). Susceptibility test was performed with E test strips, and MICs were the following: 0.25 mg/L for amphotericin B, over 64 mg/L for fluconazole, 1 mg/L for voriconazole, and over 64 mg/L for micafungin. Vancomycin and meropenem were discontinued, and

fluconazole was switched to amphotericin B deoxycolate. The catheter was removed on the sixth day of the antifungal treatment. The patient improved clinically and blood culture became negative. Amphotericin B was discontinued 14 days after the first negative blood culture.

Learning Points/Discussion

R. mucilaginosa can cause catheter-related fungemia in premature infants. Correct identification is mandatory for appropriate management, as *Rhodotorula* spp are resistant to antifungal agents, such as fluconazole and echinocandins.