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Management and Outcome of Patients with Candidaemia over One-Year

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Dear Sir,

Candidaemia is the most common manifestation of invasive candidiasis associated with significant morbidity and mortality¹. A retrospective review of management of patients diagnosed with candidaemia over twelve months at our institute was undertaken. The aim of this study was to assess compliance with local and international candidaemia management guidelines and to ascertain the clinical outcomes for these patients².

Health care records for all patients diagnosed with candidaemia from September 2019 to September 2020 were reviewed. All data was recorded and analysed confidentially in line with the GDPR after approval from our hospital clinical audit committee.

A total of 17 patients were diagnosed with candidaemia over the study period, eight males (53.3%) and seven females (46.7%). Median age of patients was 67 [IQR 50-77]. Fifteen patients were included in the analysis as two patients passed away before Candida was isolated from their blood cultures. Infection was primarily hospital-acquired (80%, n=12). The source of infection varied from intra-abdominal (46.7%, n=7), to intravenous (IV) line associated (40%, n=6) and genitourinary (13.3%, n=2).

Early IV treatment with an echinocandin or an acceptable alternative anti-fungal was initiated for all patients in accordance with guidelines². All patients received appropriate definitive antifungal treatment. For patients with IV-line-associated candidiasis, the line was removed in all cases as recommended; and for those with an intra-abdominal source, 57.1% (n=4) had appropriate interventions to achieve source control. Follow-up blood cultures were repeated in 93.3% of patients (n=14) appropriately.

An echocardiogram to rule out endocarditis and an ophthalmological exam to rule out intraocular involvement were performed for 86.6% of patients (n=13)². Antifungal treatment was continued for a minimum of two weeks after negative cultures in 80% of cases (n=12) in line with best practice. Two patients died during their course of treatment due to consequences of their underlying disease process, while all active management was withdrawn in another patient. All-cause mortality at one month after diagnosis of candidaemia was 26.7% (n=4) and at one year was 46.7% (n=7).

Overall, we found that compliance with local and international standards in the management of candidaemia at our institute was optimal, with most patients receiving appropriate treatment and undergoing therapeutic interventions². Overall mortality associated with the diagnosis of candidemia on longitudinal follow up was high in spite of appropriate management underscoring seriousness of isolation of *Candida* in the blood stream necessitating early and targeted therapy.

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