Critical illness in HIV-infected patients

Putul Sarkar
St. Helier Hospital, UK

HIV-infected patients might be admitted to ICU for many reasons. Acute respiratory failure has remained the most common cause for ICU admission in HIV patients. There are various other conditions that can cause critical illness in HIV infected patients leading to ICU admission, including central nervous system dysfunction, gastrointestinal bleeding, immune reconstitution inflammatory syndrome and cardiovascular dysfunction. However, respiratory failure with pneumonia remains the most common ICU admission diagnosis. Sepsis is emerging as an increasingly common cause for ICU admission in HIV patients. Admission diagnosis of sepsis in HIV patients is independently associated with hospital mortality. With the advent of highly active anti-retroviral Treatment (HAART), HIV has now become a chronic disease. Patients with HIV are living longer and more likely to present to hospitals with co-morbid conditions and non-AIDS related illnesses. Nearly half of ICU admissions in HIV patients are for non-HIV related critical illness in current time. The outcome of critically ill HIV-infected patients needing ICU support has improved since the AIDS epidemic. However, highest mortality rates are associated with respiratory failure and sepsis. It is notable that the respiratory illnesses that are not directly related to underlying HIV disease are now commonly encountered in the HAART era. The overall incidence of P. jirovecii as a cause of respiratory failure has declined since the AIDS epidemic and sepsis including bacterial pneumonia has emerged as a frequent cause of hospital and ICU admission amongst these patients. The debate on ICU treatment of critically ill HIV-infected patients goes on worldwide, despite an overall decline in mortality amongst these patients since the AIDS epidemic. Many intensive care physicians feel that ICU treatment of critically ill HIV patients is likely to be futile. This is mainly due to the unfavourable outcome of HIV patients with Pneumocystis jirovecii pneumonia who need mechanical ventilation. However, the changing spectrum of respiratory illness in HIV-infected patients and improved outcome from critical illness remain under-recognised. Also, the awareness of certain factors that can affect their outcome remains low. There are important ethical and practical implications for intensive care physicians while making decisions to provide ICU support to HIV-infected patients. The improved overall outcome of HIV patients needing ICU admission is related to advancement in general ICU care, including adoption of improved ventilation strategies. An awareness of respiratory illnesses in HIV-infected patients along with an appropriate diagnostic and treatment strategy may obviate the need for invasive ventilation and improve outcome further. HIV-infected patients presenting with respiratory failure will benefit from early admission to critical care for treatment and support. There is evidence to suggest that continuing or starting HAART in critically ill HIV patients is beneficial and hence should be considered after multidisciplinary discussion. Also, as a very high percentage of HIV patients are not known to be HIV infected at the time of ICU admission, the clinicians should keep a low threshold for requesting HIV testing for patients with recurrent pneumonia.

Putul.Sarkar@gmail.com