Background
Allogeneic hematopoietic cell transplant (allo-HCT) recipients are at risk of life-threatening adenovirus (AdV) viremia, where mortality among those with disseminated AdV infection or high viral loads for example, AdV viremia >10,000 copies/mL has been reported to exceed 50% in single-center studies.1,2

There are currently few practice guidelines for the detection and management of AdV infection in patients who have received allo-HCT.1-3

The 2011 European Conference of Infections in Leukemia and Lymphoma (ECLL) guideline recommended at least weekly blood screening for allo-HCT recipients who were at high risk of developing AdV infection.4

The risk is particularly high for pediatric patients, where it is often used to control AdV viremia but its usefulness is limited by nephrotoxicity.5

METHODS

Physician Characteristics

Physicians were evaluated with regard to their experiences and practices related to AdV infection and management. The primary endpoint of this study was to determine the practices used by physicians to screen for and treat AdV infection in allo-HCT recipients in Europe.

RESULTS

AdV infection is currently considered a first-line treatment in spite of toxicity concerns and lack of efficacy data.4

Most (57%) physicians who treat pediatric patients reported that they routinely screen all their pediatric allo-HCT recipients for AdV infection. Among the 7% of physicians who didn’t, all screen patients they considered to be at high risk of AdV infection (Figure 2). For routine screening of pediatric patients for AdV, most physicians sampled blood and stools, with a frequency of weekly or more often (Figure 2).

AdV infection is most commonly used first-line treatment for asymptomatic infection in adult patients (93%). Of these, use of a standard cidofovir regimen was 97% and 86% for patients over 1000 AdV copies/mL and ≤1000 AdV copies/mL respectively.5

The majority of physicians who treat adult patients (86%) reported the use of an investigational, lipid conjugate of cidofovir, that has a lower risk of nephrotoxicity and is being investigated as a potential treatment for AdV infection.6

Objectives

To determine the practice patterns used by physicians to screen for and treat AdV infection in allo-HCT recipients in Europe.

Screening, Monitoring, and Treatment of Adenovirus Infections in Pediatric and Adult Recipients of Allogeneic Hematopoietic Cell Transplants: Multicenter Survey of European Transplant Centers

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