

عنوان مقاله:

Investigation of children undergoing hematoid stem cell transplantation treated with amphotericin B administration

محل انتشار:

سومین کنفرانس بین المللی پرستاری، مامایی و مراقبت (سال: 1402)

تعداد صفحات اصل مقاله: 7

نویسنده:

Soosan Zare - Department of medical Laboratory Islamic Azad Arak University Arak.Iran

خلاصه مقاله:

Fungal infections in children are among the infections that may affect children as well as adults. The occurrence of any problem in children will be a difficult and complicated situation because children are unable to express their problem and you may not notice their problem for a while. Fungal infections are seen in many babies and children. These fungi generally occur in the folded areas of the skin. Fungi are more visible in the armpit, neck, mouth and diaper area of the baby. If diagnosed on time, fungal infections in babies can be easily cured, and if neglected, it may cause more serious complications. Disseminated fungal infection causes significant morbidity and mortality in children undergoing hematopoietic stem cell transplantation (HSCT). The widespread use of prophylactic oral triazoles has limitations of poor absorption, interindividual variability in metabolism, and hepatic toxicity. AmBisome (amphotericin B liposomal complex) has a better safety profile than the parent drug amphotericin B and produces higher plasma and tissue concentrations. We hypothesized that once-weekly high-dose AmBisome therapy could provide adequate fungal prophylaxis for immunocompromised children undergoing HSCT. We performed a pharmacokinetic pilot study to determine whether once-weekly high-dose AmBisome administration would result in ineffective concentrations throughout the dosing interval. A total of 14 children (median age, 3 years, 1 month; range, 4.5 months–9 years, 9 months) undergoing HSCT received once-weekly intravenous mBisome prophylaxis (10 mg/kg as a 2-hour infusion). Blood samples for pharmacokinetic measurements were drawn around the first and the fourth weekly doses. The concentration of non-lipid-complexed amphotericin in plasma was determined by a validated bioassay. Recipients of hematopoietic stem cell transplantation (HSCT) are at substantial risk of bacterial, fungal, viral, and parasitic infections depending on the time elapsed since transplantation, presence of graft-versus-host disease (GVHD), and the degree of immunosuppression. Infectious complications in HSCT recipients are associated with high morbidity and mortality. Bacterial infections constitute the major cause of infectious complications, especially in the early post-transplant period.

کلمات کلیدی:

Pharmacokinetics, infection, fungal infection, amphotericin

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1870036>

