and screening laboratory investigations. At Princess Margaret Hospital we perform bone marrow aspirates when screening stem cell donors. Bone marrow samples are examined for morphology and hematopoietic progenitor cell reserve using colony forming unit (CFU)-GEMM assay. We report two potential donors with occult hematopoietic malignancies on screening bone marrow aspirate. Neither patient had features of malignancy on history, physical examination or screening laboratory investigations. The first patient was a 65 year old man considered as donor for his brother with multiple myeloma. His past medical history and physical examination were unremarkable. Laboratory investigations demonstrated a normal CBC and biochemistry. A bone marrow aspirate demonstrated the presence of 12% atypical plasma cells. Further investigations showed a monoclonal paraprotein IgG kappa of 19.6 g/L. Cytogenetic analysis was normal. This was most consistent with either monoclonal gammopathy of unknown significance or smoldering multiple myeloma. CFU-GEMM assay evaluation showed 144 CFU-C, 151 BFU-E, 12 CFU-Meg and 4 CFU-GEMM. The second patient was a 72 year old man whose brother had chronic lymphocytic leukemia (CLL) on Richters transformation. His past history and physical examination were unremarkable. Laboratory investigations demonstrated a normal CBC with a normal lymphocyte count. Bone marrow aspiration showed increased cellularity with 50-60% small lymphocytes. A repeat bone marrow aspirate and biopsy confirmed these findings. Flow cytometry was consistent with CLL. In CFU-GEMM assay showed 181 CFU-C, 50 CFU-Meg and 8 CFU-GEMM. Occult hematologic malignancies in these two donors were only demonstrated on bone marrow aspirates. CFU-GEMM assays showed decreased numbers of hematopoietic progenitors in both potential donors particularly in the patient with CLL. In conclusion, in views of the relatively innocuous nature of bone marrow aspiration we consider it advisable to screen particularly older stem cell donors with a bone marrow aspirate prior to donations. CFU-GEMM assays may contribute to the identification of bone marrow problems in potential donors.

241 PREDOMINANCE OF RESISTANT GRAM POSITIVE ISOLATES AS SOURCES OF BACTEREMIA IN GVHD PATIENTS TREATED WITH INFlixIMAB
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Infliximab has been evaluated as a treatment option for patients with GVHD due to its mechanism of tumor necrosis factor alpha blockade. We evaluated all bacteremic episodes that occurred within 6 months of infliximab administration in 31 patients with steroid-refractory acute GVHD. Bacteremic episodes were unremarkable. Laboratory investigations demonstrated a normal CBC and biochemistry. A bone marrow aspirate demonstrated the presence of 12% atypical plasma cells. Further investigations showed a monoclonal paraprotein IgG kappa of 19.6 g/L. Cytogenetic analysis was normal. This was most consistent with either monoclonal gammopathy of unknown significance or smoldering multiple myeloma. CFU-GEMM assay evaluation showed 144 CFU-C, 151 BFU-E, 12 CFU-Meg and 4 CFU-GEMM. The second patient was a 72 year old man whose brother had chronic lymphocytic leukemia (CLL) on Richters transformation. His past history and physical examination were unremarkable. Laboratory investigations demonstrated a normal CBC with a normal lymphocyte count. Bone marrow aspiration showed increased cellularity with 50-60% small lymphocytes. A repeat bone marrow aspirate and biopsy confirmed these findings. Flow cytometry was consistent with CLL. In CFU-GEMM assay showed 181 CFU-C, 50 CFU-Meg and 8 CFU-GEMM. Occult hematologic malignancies in these two donors were only demonstrated on bone marrow aspirates. CFU-GEMM assays showed decreased numbers of hematopoietic progenitors in both potential donors particularly in the patient with CLL. In conclusion, in views of the relatively innocuous nature of bone marrow aspiration we consider it advisable to screen particularly older stem cell donors with a bone marrow aspirate prior to donations. CFU-GEMM assays may contribute to the identification of bone marrow problems in potential donors.

242 CYTOMEGALOVIRUS (CMV) GASTROINTESTINAL DISEASE IN ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANT RECIPIENTS UNDER PREEMPTIVE THERAPY BASED ON CMV ANTIGENemia OR POLYMERASE CHAIN REACTION
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Preemptive therapy for CMV infection/disease based on CMV antigenemia or polymerase chain reaction (PCR) has been established as the standard approach after allogeneic hematopoietic stem cell transplantation (allo-HSCT). We have evaluated the failure cases developing CMV disease, particularly gastrointestinal (GI) disease, under CMV monitoring and the following preemptive therapy. [PATIENTS & METHODS] From February 1999 to July, 2002, 172 patients received allo-HSCT in Keio University Hospital, and all were monitored CMV reactivation by CMV antigenemia (C10/11) and plasma real-time PCR, whose positive results were followed by preemptive therapy with ganciclovir. Among the patients, 11 patients developed histologically diagnosed CMV GI disease (up to day 100 for lower GI disease). All patients received allo-HSCT (related 5, unrelated 7) for hematologic malignancies, including acute leukemia (n=6), myelodysplastic syndrome (n=3), chronic myelogenous leukemia (n=1), low-grade lymphoma (n=1), and multiple myeloma (n=1). 10 patients received TBI-based regimens, and 2 received fludarabine-based regimen for conditioning. GVHD prophylaxis was short-term MTX with cyclosporin A (n=9) or tacrolimus (n=3). All patients developed grades II-IV acute GVHD (grade II 5, grade III 2, grade IV 1). [RESULTS] CMV GI disease developed at a median of day 31 post-transplant (range:19-120). CMV antigenemia and plasma real-time PCR did not become positive before the onset of CMV GI disease in 11 and 8 of 12 patients, respectively. Throughout the clinical course, CMV antigenemia remained at a low level in 7 of 12 patients, while CMV copy number in plasma evaluated by real-time PCR markedly elevated in all patients. [CONCLUSION] Preemptive therapy based on CMV antigenemia or PCR allows the development of CMV GI disease, since CMV antigenemia and PCR does not precede the disease development or does not precede early enough to prevent the disease development with antiviral therapy. Furthermore, CMV antigenemia could not reflect the activity of CMV GI disease, while plasma real-time PCR could.

243 PHARMACOECONOMICS OF PROPHYLAXIS FOR FUNGAL INFECTIONS IN PATIENTS UNDERGOING A HEMATOPOIETIC STEM CELL TRANSPLANTATION
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BACKGROUND. A recent multi-center, blinded, randomized, head-to-head comparative study evaluated the safety and efficacy of prophylaxis in 882 hematopoietic stem cell transplantation (HSCT) patients using either micafungin or fluconazole. The overall success rate for micafungin was significantly higher than the rate for fluconazole patients (80.0% vs 73.5%). The incidence of systemic fungal infections was lower for micafungin (1.6% vs 2.4%). The objective of this economic evaluation is to determine outcomes and costs associated with micafungin prophylaxis in HSCT compared to a no prophylaxis protocol. METHODS. A cost minimization study was performed to compare costs of no prophylaxis vs prophylaxis with micafungin. The analysis was conducted from
costs and outcomes associated with prophylaxis treatment success and discharge. A decision analysis model was developed to incorporate clinical outcomes for no prophylaxis were derived from a review of published literature. Clinical outcomes for prophylaxis with micafungin were based on the results of the clinical study. Published literature was used to assess hospital costs associated with IFI. Clinical outcomes for no prophylaxis were based on the results of the clinical study. Published literature was used to assess clinical outcomes for prophylaxis with micafungin were based on the results of the clinical study. Published literature was used to assess hospital costs associated with IFI. Clinical outcomes for no prophylaxis were based on the results of the clinical study. Published literature was used to assess hospital costs.