Burkitt Lymphoma Post Kidney Transplantation

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INTRODUCTION AND AIMS:

Burkitt lymphoma (BL) is a very aggressive subtype of B-cell lymphoma with a high mortality rate. It can occur after solid organ transplantation but is a very rare subset of post-transplantation lymphoproliferative disorder (PTLD). The World Health Organization (WHO) classification recognizes two variants of BL: sporadic and immunodeficiency-associated BL. No specific therapeutic approach has been established due to its rarity.

METHODS

We conducted a retrospective multicenter study in all adult renal transplant recipients (RTR) who developed BL-PTLD between 1998 and 2008.

RESULTS

A total of 22 patients (17 males) were enrolled in this study. They received a kidney transplantation (KT) between 1982 and 2007. BL-PTLD was diagnosed after a mean delay of 6.8 years (range 0.3-24) after KT. Among them, three (14 %) received a living donor graft and three received a 2nd transplant. Of note, five patients were recipient negative/ donor positive for CMV (R-/D+) and five were R-/D- at kidney translantation. Acute rejection episode prior to BL-PTLD occured in 9 patients (40 %).

PTLD localization was renal graft in two patients whereas 6 (27%) had bone marrow involvement. Immunosuppression was tapered in all patients at the time of diagnosis before or during first-line chemotherapy treatment.

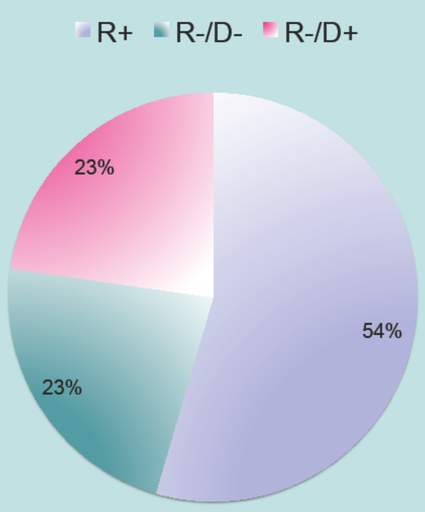

Fig1: CMV profile at transplantation

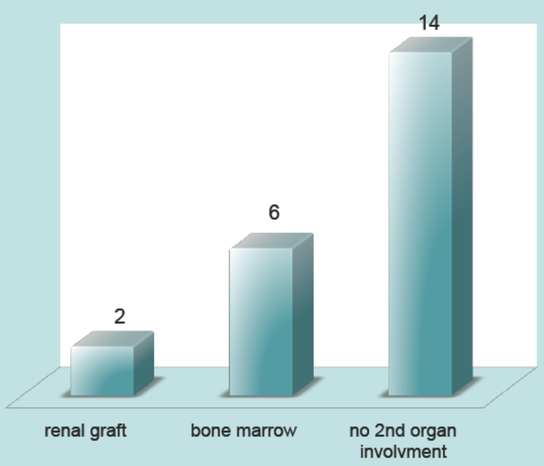

Fig2: Organ involvement at diagnosis

RESULTS

First-line treatments consisted of polychemotherapy for 20 patients (including rituximab in four) whereas two patients received rituximab alone.

Complete remission was obtained in 50 % of patients after first-line treatment. Eleven patients (50%) died after a median delay of 8 months after diagnosis (range 0-96), including two deaths related to BL-PTLD progression and five to infectious complications.

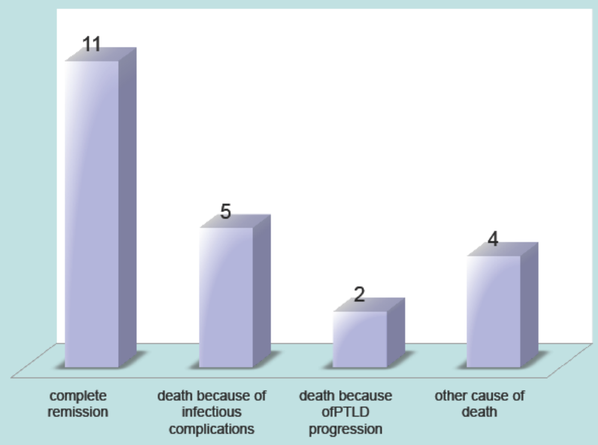

Fig3: Prognosis after first-line treatment

CONCLUSIONS

BL-PTLD is a rare but serious complication that occurs after RT. Prospective studies are warranted.

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