A Case Report of Posttransplant Lymphoproliferative Disorder

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Background: Posttransplant lymphoproliferative disorder (PLTD) is a type of lymphoid neoplasm associated with immune suppression following organ transplantation. Organ transplantation has been developing rapidly in Mongolia. Since 2006, kidney transplantation is begun and during this period performed 239 cases, liver transplantation is begun since 2011 and performed 120 cases, hematopoietic stem cell transplantation – since 2014 and performed 24 cases. Due to the introduction of organ transplantation technology into our clinical practice, we began to face to PLTD cases.

Purpose: To introduce a case of B cell Non Hodgkin lymphoma, associated with organ transplantation in Mongolia.

Materials and Method: Diagnosis was based on clinical, laboratory, and instrumental tests, including immunohistochemistry, and treatment was performed according to international guidelines.

Results: 31-year-old woman. After a kidney transplant in 2015, immunosuppressive induction therapy was performed by basiliximab, and for the first 2 years, tacrolimus, mycophenolate mofetil, and prednisolone were taken. In July 2017, she had normochromic, normocytic, severe anemia, which did not recover after using iron. In September 2017, gastroscopy revealed multiple erosions and ulcer lesions in stomach and duodenum. A diagnosis of PLTD was confirmed by biopsy from affected area of stomach and immunohistochemistry, in which CD45 /1+/, CD20 /3+/, CD3 /1+/, CD10 /1+/, CD79a /3+/, Cyclin D1 /1+/, EBV /1+/ markers were positive. Imaging examination revealed several lymphadenopathies more than 1 cm in size. In time of diagnosis in assessment by ECOG was 2 score, by Ann Arbor stage was IV stage, by IPI scoring 3 (with intermediate risk). Some immunosuppressive drugs have been eliminated, replaced, and doses reduced. Prednisolone continued to be used, mycophenolate mofetil and tacrolimus were replaced by sirolimus. But after 1 month of using sirolimus this drug was replaced by cyclosporine A because of financial problem. Due to the use of cyclosporine A we observed periodic anemia and renal failure. Unfortunately, due to the warning of renal rejection, immunosuppression was not stopped. At first line chemotherapy she underwent 4 courses of Rituximab (once a week). Evaluation of patient’s status was performed. But ulcer lesions in gastrointestinal tract is not fully recovered and lymphadenopathies are increased in size and numbers. Since February until June 2018, we did 6 courses of R-CHOP chemotherapy. But in August 2018, the patient died due to a progressing of the disease, involving the central nervous system, where we couldn’t start any chemotherapy because of patient’s condition.

Conclusion: Due to development of various organ transplantation, the incidence of PTLD may increase. PTLD may appear at any time after transplantation. A detailed examination should be needed to rule out any changes occurred in the transplant cases. The regular EBV infection monitoring is very important to patients with high immunosuppressive therapy.

Keywords: Organ transplantation, Posttransplant lymphoproliferative disorder, Central nervous system lymphoma, Epstein-Barr virus