Post-transplant lymphoproliferative disorders: a simplified overview

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Post-transplant lymphoproliferative disorders comprise a spectrum of reactive to neoplastic lymphoid proliferations that occur in organ transplant recipients as a result of the iatrogenic immuno-suppression. They usually appear within 1 year after the transplant, although they can sometimes occur after a long interval. Most cases are B-cell proliferations that are driven by Epstein-Barr virus, and the major types are 1. early lesions (plasmacytic hyperplasia and infectious mononucleosis-like lesion), which are usually polyclonal; 2. polymorphic post-transplant lymphoproliferative disorders, which are usually oligoclonal or monoclonal; and 3. monomorphic post-transplant lymphoproliferative disorders, which are morphologically identical to conventional lymphomas, are monoclonal, and commonly exhibit structural alterations in oncogenes and tumor-suppressor genes. Early lesions and a proportion of polymorphic post-transplant lymphoproliferative disorders regress with reduction in immunosuppressants, whereas almost all monomorphic post-transplant lymphoproliferative disorders progress and require lymphoma-type treatment. (Hong Kong J Nephrol 2001;3(2):57-66)

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