MALIGNANCIES

POST-TRANSPLANT LYMPHOPROLIFERATIVE DISORDERS "PTLD"

Screening

→ Monitor for primary EBV infection and monitor for reactivation of EBV with PCR post-transplant as it is the most commonly used laboratory test to monitor patients who are at risk for developing PTLD after solid organ transplantation (SOT) or bone marrow transplantation.[1]

→ Complete blood cell count, comprehensive chemistry panel and pay attention to the metabolic panel for signs of tumor lysis syndrome.[2]

→ Lactate dehydrogenase (LDH) levels because High levels of LDH can be caused by cancer. In cases of lymphoma, high levels of LDH may be a sign that the cancer is more widespread, or that it will prove less responsive to treatment.[3]

Management

N.B. Reduction of immunosuppression may be preferred when alternative organ support is available (e.g. renal or renal/pancreas transplant).

Initial management depends on the type of PTLD;[4]

→ **Early lesions**: Just reduce MMF dose to 25 to 50 % of baseline if alternative organ support is available. For heart and lung transplants, immunosuppression is generally reduced to 50% of baseline.

→ **Polymorphic PTLD:** patient that expresses CD20 (CD20+), we suggest the use of **rituximab** in addition to reduction of immunosuppression, as tolerated.

→ **Monomorphic PTLD**: For patients with monomorphic CD20+ PTLD, we suggest the use of **rituximab**, either alone as in case of patients who have minimal symptoms and for those who are not candidates for initial chemotherapy (e.g. poor performance status) in addition to reduction of immunosuppression, if possible **OR** in combination with chemotherapy (e.g. CHOP) in addition to reduction of immunosuppression, if possible for other CD20+ PTLD patient.

→ **N.B.** Patients whose tumors do not express CD20 are not candidates for rituximab therapy and are treated with combination chemotherapy plus reduction of immunosuppression, if possible.

→ **Classic Hodgkin lymphoma-like PTLD**: Managed with chemotherapy with or without radiation therapy according to protocols used for classic Hodgkin lymphoma.

INCREASED RISK FOR SKIN CANCER

→ Exposure to sunlight and UV light should be limited by wearing protective clothing and using a sunscreen with a high protection factor.[5]

(1) Singavi AK, Harrington AM, Fenske TS. Post-transplant lymphoproliferative disorders. Cancer Treat Res [Internet]. 2015 [cited 2021 Nov 21];165:305–27. Available from: https://pubmed.ncbi.nlm.nih.gov/25655616/

(2) Posttransplant Lymphoproliferative Disease (PTLD): Practice Essentials, Pathophysiology, Epidemiology [Internet]. [cited 2021 Nov 21]. Available from: https://emedicine.medscape.com/article/431364-overview

(3) No. 33 in a series providing the latest information for patients, caregivers and healthcare professionals Post-Transplant Lymphoproliferative Disorders. [cited 2021 Nov 21]; Available from: www.LLS.org/booklets.

(4) Treatment and prevention of post-transplant lymphoproliferative disorders - UpToDate [Internet]. [cited 2021 Nov 21]. Available from: https://www.uptodate.com/contents/treatment-and-prevention-of-post-transplant-lymphoproliferative-disorders?search=ptld&source=search_result&selectedTitle=2~96&usage_type=default&display_rank=2

(5) EMA. ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS.