

Pediatric Immunization Practices Post-Hematopoietic Stem Cell Transplantation: A Retrospective Chart Review

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Hematopoietic cell transplant (HCT) recipients require re-immunization due to each patient losing immunities acquired prior to transplant. Re-immunization begins once adaptive (T and B cell) immunity is at least partially reconstituted. Vaccinations are often delayed post-transplant due for various reasons including but not limited to rituximab administration, intravenous immune globulin administration, immunosuppression, chronic graft versus host disease, or patients who have transitioned to a primary care physician. Immunization guidelines have been developed and published by various groups to guide health care practitioners when to start vaccinations, which vaccination, and the frequency of administration. While these are useful tools, it is often difficult to identify the correct time to start re-immunizing due to various patient factors or get the patient back to receive further vaccines in a series. This retrospective chart review aimed to assess vaccination practices post-transplant at a major pediatric hospital and help to identify any inconsistencies or areas for improvement. A major limitation to the study was incomplete vaccination records. Incomplete vaccine records due to gaps in transitions of care, loss to follow-up, and insufficient documentation leave HCT recipients vulnerable, especially for the autologous HCT recipients at the hospital. At Children's Mercy, allogeneic HCT recipients have more complete documentation of their revaccination schedules. The documentation of revaccination is incomplete for the autologous HCT recipients. Future studies will evaluate efficient methods for documenting and obtaining vaccination histories from primary care providers to ensure vaccination schedule completion, as well as develop oncology service vaccination practices for post-chemotherapy and auto recipients to ensure these patients are appropriately vaccinated.