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Poster Session V

Immunology, vaccination and host defences

PERSISTENCE OF YELLOW FEVER VACCINE-INDUCED ANTIBODIES AFTER SOLID ORGAN TRANSPLANTATION

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Objectives

Immunization using live attenuated vaccines represents a contra-indication after solid organ transplantation (SOT): consequently, transplant candidates planning to travel in countries where yellow fever is endemic should be vaccinated prior to transplantation. The persistence of yellow fever vaccine-induced antibodies after transplantation has not been studied yet.

Methods

We measured yellow-fever neutralizing antibodies in 53 SOT recipients vaccinated prior to transplantation (including 29 kidney recipients and 18 liver recipients).

Results

All but one (98%) had protective titers of antibodies after a median duration of 3 years (min.: 0.8, max.: 21) after transplantation. The median antibody level was 40 U/L (interquartile range: 40–80). For the 46 patients with a known or estimated date of vaccination, yellow-fever antibodies were still detectable after a median time of 13 years (range: 2–32 years) post-immunization.

Conclusion

Our data suggest there is long-term persistence of antibodies to yellow fever in SOT recipients who have been vaccinated prior to transplantation.