

Management of measles risk in transplanted patients in South Island of New Zealand

Introduction

There is insufficient data to define the optimal strategy for preventing measles infection in patients with haematological malignancy who have received autologous and allogeneic stem cell transplant and the real-world risk is not known.

There is a poor correlation between measured antibody levels and risk of infection. Any guidelines must take into account both patient-specific factors and also the local prevalence of measles and uptake of vaccination in the community.

The following guidance is intended to provide a framework for individualised decision-making but it is recognised that it is not possible to foresee every circumstance and a degree of pragmatism is necessary.

The incidence of measles infection varies widely around New Zealand. At the time of writing the number of cases of measles in Canterbury is low compared to Auckland which most likely reflects the higher uptake of vaccination in Canterbury and better herd immunity.

Among the general population those at greatest risk of those have not received two doses of the MMR vaccine and were not naturally exposed to the infection before immunization was introduced. Refer to the Ministry of Health website for further information (<https://www.health.govt.nz/our-work/diseases-and-conditions/measles-information-health-professionals>)

The haematology-oncology patient population at greatest risk are those who have received allogeneic transplantation.

The following general statements apply to patients living in Canterbury

Patients receiving chemotherapy for lymphoma and myeloma are at low risk and serological testing is not recommended. Recommendations for measles vaccination are age-specific and the same as for the general population.

Patients who have undergone autologous stem cell transplantation are at low risk and serological testing is not recommended. Recommendations for measles vaccination are age-specific and the same as for the general population. Other vaccinations are as recommended in the patient's transplant protocol.

Patients who have undergone allogeneic stem cell transplant are at higher risk. Vaccination is not recommended before two years and only for seronegative patients who are not receiving immunosuppression and do not have active GVHD. Up to 2 years protection is through herd immunity and vaccination of close contacts. Unvaccinated patients within 2 years after allogeneic transplant with a documented exposure to measles may be protected by intravenous immunoglobulin.