

E063

2-hour Educational Workshop

Vaccination of immunocompromised and allergic patients - are we missing the obvious?

Update on vaccination of oncology patients

P. Ljungman¹

¹*Karolinska Institutet and Karolinska University Hospital, Stockholm, Sweden*

Infections are important causes of morbidity and mortality in the most severely immunocompromised patients including cancer patients. Vaccination is a logical way to prevent some of these infections such as pneumococcal infections and influenza. In addition, the most severely immunocompromised patients such as patients undergoing allogeneic stem cell transplantation (HSCT) lose immunity over time making them vulnerable to infections such as measles or tetanus. It should be recognized that most cancer patients are not very vulnerable to severe disease due to pathogens preventable by vaccination. Therefore most data exist on patients having hematological malignancies or HSCT patients. Due to the "numbers game" it is very difficult to evaluate the preventive effect against the infections directly (with the possible exception of influenza) and therefore surrogate markers such as immune responses have to be used for evaluation of the effectiveness of vaccination. Different strategies can be employed when designing vaccination protocols. These include to vaccinate patients before initiation of cancer therapy, to carefully select the timing adapted to the given cancer therapy, and to choose the vaccines most likely to confer protective immune responses such as protein-conjugate vaccines instead of polysaccharide vaccines, and adjuvanted vaccines rather than non-adjuvanted. Dosing schedules also might be different compared to immune competent individuals such as adding additional doses. The risk for side effects is low with non-live vaccines but with live, attenuated vaccines severe side effects are possible and the vaccination protocols have to be adapted accordingly.