Immunology as applied to vaccination

Pramod Jog  
Dr. D. Y. Patil Medical College, Hospital & Research Centre, India

The main aim of the immune system is to recognize self from foreign and to eliminate the harmful foreign substances from the body. This is done through recognition of antigens on the foreign substances or organisms. The response mounted by the body is called immune response and it consists of producing either proteins called antibodies as in humoral response or specific cells called cellular response. The antigen (Ag) is presented to the Antigen Presenting Cell (APC). The Ag-APC complex reaches the lymph node and stimulates either CD4 (helper) or CD8 (cytotoxic) T cell. The CD4 T cell produces either Th1 or Th2 cells. Th2 cells stimulate B cells to produce either plasma cells or memory cells. Plasma cells produce antibodies. The presentation will discuss the dynamics of antibody production; primary response, secondary response, immunological basis of conjugated vaccines etc.

Biography

Pramod Jog is Professor of Pediatrics at Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pune, India. He has been the President of Indian Academy of Pediatrics, 2016. He is standing committee member of IPA (International Pediatric Association) 2016-19, steering committee member of GAVI (CSO) 2016-19 and Associate Fellow.

dr_pramodjog@yahoo.co.in