使用 CD20 抗體治療血液疾病之經驗

The Experience of Anti-CD20 (Rituximab) in the treatment of hematological disease

唐季祿

國立台灣大學醫學院暨附設醫院　內科部

The CD20 antigen is an attractive target for antibody-directed therapy due to its stable, high-level surface expression on normal and malignant B cells. Rituximab, an anti-CD20 chimeric mouse/human monoclonal antibody, mediates complement-dependent cell lysis and antibody-dependent cellular cytotoxicity. It also sensitizes chemoresistant human lymphoma cell lines and induce apoptosis. This antibody has a long serum half-life and low immunogenicity. Rituximab is the first monoclonal antibody approved for the treatment of cancer and the first single agent approved specifically for therapy of B-cell lymphoma. Between 1999 and 2001, weekly Rituximab treatment at 375 mg/m^2 as either single agent or in combination with chemotherapy was used in 57 adult patients with various types of B-cell malignancy in our hospital. Treatment was well tolerated and outpatient therapy feasible. Adverse events were mostly grades 1 and 2, occurring primarily with the first infusion. Temporary B-cell depletion occurred but had not been associated with significant immunodeficiency. In low-grade B-cell diseases including chronic lymphocytic leukemia, follicular lymphoma, MALToma, Rituximab alone induced partial remission and complete response (even molecular remission) could be achieved by combined with intensive chemotherapy. However, the response rate was <30% in aggressive lymphoma treated at refractory relapsed stage and the anti-tumor effect was transient. Rituximab was also used before collection of peripheral blood stem cell collection (in vivo purging), or peri-high-dose therapy and stem cell transplant to eradicate residual tumor cells. Recently, Rituximab was found to be effective in refractory autoimmune disorders including immune thrombocytopenic purpura, autoimmune hemolytic anemia and pure red cell aplasia.