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Editorial Open access

Rituximab: Is it Possible to Link Both Autoimmune Haemolytic Anemia and Aplastic Anemia Regarding the Etiology and Management?

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Editorial

In the past few years, rituximab has been recognized as a safe and effective emerging treatment for autoimmune hemolytic anemia (AIHA) [1,2]. Rituximab was also considered as a preferred second-line therapy of warm antibody hemolytic anemia in adults in some major European centers and it was shown that second-line treatment with rituximab led to response rates similar to splenectomy (approximately 70%) [3]. Further, a lower dose of rituximab, with satisfactory safety and efficacy, was better than the conventional glucocorticoid in the treatment of elderly AIHA patients [4].

In 2002, rituximab was suggested as a first-line treatment for pure red cell aplasia after allogeneic bone marrow transplantation [5]. Three years later, rituximab was used successfully for treatment of a 73-year-old female with aplastic anemia, and the use of anti-CD20 monoclonal antibody in aplastic anemia was suggested to warrant further investigation [6]. Meanwhile, rituximab was shown to induce remission in a 68-year-old female with severe aplastic anemia induced by fludarabine and cyclophosphamide treating her B-cell chronic lymphocytic leukemia [7]. In 2011, rituximab was shown to induce remission in a 1-yr-old Japanese male infant developed hepatitis-associated aplastic anemia [8]. Recently, rituximab plus autologous hemotopoietic stem cell transplantation were used for the treatment of CD5 positive diffuse large B cell lymphoma with AIHA [9].

From my point of view, the great and successful usage of rituximab in the management of AIHA warrants more focused research on its full of potentials successful usage in aplastic anemia management. Following the footprints of rituximab, I expect more secrets to be revealed in the pathogenesis of aplasitc anemia; secrets that may connect the two hematological disorders as regard to the etiology and revolutionize their management in the near future.

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