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ORAL

Chromosomal abnormalities and treatment response in Multiple myeloma patients at Cho Ray hospital

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Abstract

Multiple myeloma (MM) is a malignant plasma cell, generating abnormal immunoglobulins in the blood and urin. From January 2012 to December 2014, we performed chromosome analysis and treatment for 44 MM patients with the regimens containing Bortezomib (VD, VMP, VD plus autologus hematopoietic stem cell transplantation) at the Hematology department, Cho Ray hospital. The patient median of age was 64 year old, with the proportion of male/female was 0.83. IgG and IgA were two most common M-protein with accounting for 44.7% and 22.7%, respectively. Patients were usually admitted to the hospital late in phase II and III of disease. 43 of 44 MM patient haboring chromosomal abnormalities. Karyotyping analysis results showed that 3.7% cases with hypodiploidy and 14.8% cases hyperdiploidy. Translocation t(4;14), t(6;14), t(11;14) and t(14;16) were found in 6.8%, 4.5%, 11.3% and 4.5% of cases, respectively. Del(13q) and del(17p) accounted for 31.8% and 29.5% of cases. High risk group was found in 40.9% of cases. Patients carrying the translocation t(4;14) had the worse prognosis than other abnormalities with low response rate and overall survival, whereas higher rate of mortality. Results of our study showed that chromosomal abnormalities in MM are diversity and high percentage that affect the prognosis. Therefore, we need to indentify chromosomal abnormalities before treatment to select appropriate therapy regiments.

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Multiple myeloma, Karyotyping, Chromosomal abnormalities

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