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## 627.AGGRESSIVE LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

**Analysis of Influencing Factors of Positive Antiplatelet Antibody in Patients with Diffuse Large B-Cell Lymphoma**Wei Zhang<sup>1</sup>, Longrong Ran<sup>1</sup>, Mingyu Zhao<sup>1</sup>, Yu Peng<sup>1</sup>, Xin Luo<sup>1</sup>, Shuang Chen<sup>1</sup>, Zailin Yang<sup>1</sup>, Yao Liu, PhD MD<sup>1</sup><sup>1</sup>Department of Hematology-Oncology, Chongqing University Cancer Hospital, Chongqing, China

**Background** Diffuse large B-cell lymphoma (DLBCL) is a common malignant tumor of the hematological system. Chemotherapy is the main treatment. As a cytotoxic drug, chemotherapeutic drugs can lead to thrombocytopenia, increase the risk of bleeding and require platelet transfusion if necessary. Since platelet antibody is the main cause of ineffective platelet transfusion, the detection of platelet antibody is of great significance to prevent the inefficacy of platelet transfusion in patients with diffuse large B-cell lymphoma.

**Objective** To analyze the screening results of antiplatelet antibodies in patients with diffuse large B-cell lymphoma and to explore the main factors affecting the production of antiplatelet antibodies so as to provide basis for safe blood transfusion.

**Methods** Patients with diffuse large B-cell lymphoma treated in our department from August 2022 to May 2023 were selected as subjects. Antiplatelet antibodies (GP IX, GP I b, GPIIb, GPIIa, GMP140) were detected by flow cytometry. The factors affecting the positive antiplatelet antibodies were analyzed from the aspects of clinical characteristics and laboratory indexes.

**Results** In 155 patients with diffuse large B-cell lymphoma, the positive rate of antiplatelet antibody was 63.23% (98/155). Among them, the positive rate of antiplatelet antibody in male patients was 63.75% (51/80), higher than that in female patients was 62.67%(47/75), and the difference was statistically significant ( $P < 0.05$ ). The positive rate of antiplatelet antibody in patients over 60 years old was 65.18% (43/67), higher than that in patients aged  $\leq 60$  years old was 62.5%(55/88). The difference was statistically significant ( $P < 0.05$ ). In addition, the positive detection of antiplatelet antibody was related to the abnormal results of large platelet ratio, mean platelet volume, D-dimer and aspartate aminotransferase. In the positive distribution of antiplatelet antibodies, the positive rates of GP IX, GP I b, GPIIb, GPIIa and GMP140 autoantibodies were 1.29% (2/155), 29.03% (45/155), 37.42% (58/155), 1.29% (2/155), 49.68% (77/155), respectively. The positive number of antiplatelet antibodies was related to the abnormal results of partial prothrombin time, prothrombin time, prothrombin activity, international standardized ratio, thrombin time, fibrin (prothrombin) degradation products, globulin, alanine aminotransferase and aspartate aminotransferase.

**Conclusion** Patients with diffuse large B-cell lymphoma with abnormal results of large platelet ratio, mean platelet volume, D-dimer and aspartate aminotransferase should pay attention to the detection of antiplatelet antibodies before platelet transfusion to prevent transfusion failure.

**Disclosures** No relevant conflicts of interest to declare.

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