Detection of serum antinuclear antibodies in lymphoma patients

H.Y. Zou1*, X. Gu2*, W.Z. Yu1, Z. Wang1 and M. Jiao1

1Institute of Clinical Medicine, Urumqi General Hospital of Lanzhou Military Command Area, Urumqi, China
2Department of Pathology, The First Affiliated Hospital of Guangzhou Medical College, Guangzhou, China

*These authors contributed equally to this study.
Corresponding author: H.Y. Zou
E-mail: zouhongy2@126.com

Received August 27, 2015
Accepted October 24, 2015
Published December 11, 2015
DOI http://dx.doi.org/10.4238/2015.December.11.1

ABSTRACT. We investigated the presence of serum antinuclear antibodies (ANAs) and autoantibodies and their relationship with serum prognostic indicators in lymphoma patients. The study population comprised 127 patients diagnosed with lymphoma and 138 healthy control subjects. The blood samples of the participants were assayed for ANAs by immunofluorescence, and autoantibodies were detected by western blotting. Serum ANAs were detected in 31.5% (40/127) and 6.5% (9/138) of lymphoma patients and control subjects, respectively. There was a statistically significant difference between the lymphoma and the control groups (P < 0.05). The level of lactate dehydrogenase in the ANA-positive subjects was significantly lower than in the ANA-negative subjects (P < 0.05). Low ANA titers (1:100) were commonly found in the ANA-positive subjects and the control subjects, and the fluorescence models were diverse. Autoantibodies were found in 35% (14/40) of the ANA-positive patients by western blotting. Detection of ANAs in lymphoma patients helps in determining the diagnosis and prognosis of lymphoma, but has
no independent diagnostic value; there are still various autoantibodies of unknown significance that require further study.

**Key words:** Antinuclear antibodies; Autoantibodies; Lymphoma