

## ABSTRACT

### Hematologic abnormalities in childhood SLE in a University Hospital

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**Background:** SLE is a chronic autoimmune disorder with systemic manifestations and multiorgan involvement. Hematologic manifestations are more common in pediatric SLE(pSLE) such as anemia, leucopenia, lymphopenia and thrombocytopenia. pSLE is common in adolescent and has high mortality rate. The study of incidence of hematologic manifestations and risk factors associated with thrombotic events were limited in Thailand.

**Objective:** The primary objective of this study was to determine incidence of hematologic manifestations in children aged < 15 years who were diagnosed with SLE at the department of Pediatrics, Siriraj Hospital, from 2005-2016. The secondary objective was to determine incidence of thrombosis and association of clinical and laboratory, mortality rate, caused of death and survival in pSLE.

**Methods:** We retrospectively reviewed the medical records and collected data including demographic data, underlying disease, clinical presentation, laboratory result, SLICC and ACR score, thrombotic event, mortality rate and caused of death.

**Result:** There were in 206 patients in this study. Median age at presentation was 11 year. Hematologic abnormalities were the most common clinical manifestation which were 76.2% per ACR criteria and 71.8% per SLICC criteria. Lymphopenia was most common(67.5%) in hematologic manifestation per ACR and autoimmune hemolytic anemia was most common(56.7%) per SLICC criteria. Thrombotic event was found in 23 patients(11.2%) which thrombotic microangiopathy was the most common(60.8%). Logistic regression analysis showed significant association of thrombotic event with thrombocytopenia, antiphospholipid syndrome, CNS manifestations and serositis. Mortality rate in this study was 4.9% and infection was the most common cause of death. Logistic regression analysis showed significant association of death with renal manifestation, serositis and hemoglobin at presentation < 8 g/dl.

**Conclusion:** Hematological manifestations were the most common manifestation in pSLE. There were significant association of thrombocytopenia, thrombotic event and thrombosis had high mortality rate.

**Keywords:** Hematologic abnormalities, pediatric SLE, thrombotic event, mortality

