

Trends and Survival of Childhood Cancers in Srinagarind Hospital During 1993-2012

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Background and Objective : Survivals of childhood cancers have been gradually increasing resulting from understanding of cancer biology, improving of anticancer agents and supportive cares. In Thailand, treatment protocols have been change lately. In addition, access to treatment has been improved by national universal coverage. Survivals of childhood cancer patients have not described.

Methods: Trends and survivals of children aged < 15 years with childhood cancers diagnosed during 1993-2012 were investigated using hospital-based data of the Khon Kaen Cancer Registry. All 1,698 cancer cases were treated at Srinagarind hospital, excluding foreigner patients. The childhood cancers were classified into 12 diagnostic groups according to the International Classification of Childhood Cancer based on the histology of the cancer. Survivals were described by period according to the time point of changing of the treatment protocols. For leukemias, the survival was assessed based on 3 periods (1993-99, 2000-5, 2006-12) while 2 periods for solid tumors (before and after 2000). The 5-year overall survival was calculated by the Kaplan-Meier method.

Results: The survivals of acute lymphoblastic leukemia (ALL) improved significantly over time (43.7, 64.6, 69.9%) while the survivals of acute non lymphoblastic leukemia (ANLL) remained the same (28.1, 42, 42.2%), during 1993-9, 2000-5, 2006-12 . Trends of survival in ALL increased dramatically but not for ANLL. Similarly, survivals of non-Hodgkin lymphoma (NHL) improved significantly over time (44, 65.5, 86.8%) while the survivals of Hodgkin disease (HD) remained the same (30.1, 66.1, 70.6%). Trends of survival in NHL increased dramatically but not for HD. The survivals of solid tumors (liver tumors, retinoblastoma) were significantly increased comparing those of after and before 2,000 while survivals for CNS tumors, neuroblastoma and bone tumors were not changed.

Conclusions: The survivals of childhood cancer patients have been markedly improving in Srinagarind hospital, related to advances in treatment, supportive care and importantly, patient compliance. However, survival for particular diseases has not been changed. Novel approaches may be needed.

Key words: childhood cancer, trend, survival, hospital-based

