



## Invasive Fungal Infections (Ifis) in Childhood Cancer in Srinagarind Hospital

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**Background and Objective:** The incidence of invasive fungal infections (IFIs) in children with hematologic malignancy is increasing. It can occur in any organ of the body, such as sinus, lung, brain and gastrointestinal tract. This study aim to describe IFIs in pediatric patients with hematologic malignancy including clinical manifestation, risk factor, treatment and outcome.

**Method:** Retrospective descriptive study in pediatric patients with hematologic malignancy aged less than 15 years old who were definitely diagnosed IFIs between Jan 1<sup>st</sup>, 2008 and Dec 31<sup>st</sup>, 2012.

**Results:** Seventeen of the 287 patients (5.9%) diagnosed with IFIs were defined as proven in 2 (11.7%), probable in 8 (47%), and possible in 7 (41.1%). Among these, 1 had a yeast infection (*Candida tropicalis*) and 16 had mold infections; *Aspergillus* (7), and *Mucor* (2).

The underlying diseases were ALL (11), AML (5) and lymphoma (1). Factors contributed to IFIs including prolonged antibiotic use, absolute neutrophil count < 500 cells/ml, absolute lymphocyte count < 500 cells/ml, steroid use, total parenteral nutrition and central line catheter placement. The sites of IFIs were most common in the lungs, followed by sinus and nose, spleen and kidney. All patients with IFIs were practically treated with antifungal medications with improvement in 12 and death in 4 patients.

**Conclusions:** IFIs is increasingly diagnosed in pediatric patients with hematologic malignancy, resulting in worst outcome and increased death. Patients suspicious of IFIs should be appropriately investigated and treated promptly for good outcomes.

**Key words:** IFIs, hematologic malignancy

