

Title: Clinical Characteristics and Outcome of Reactive Arthritis in Children

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Background: Reactive arthritis (ReA) is an immune-mediated inflammatory arthritis following infections. There is currently limited data of ReA in children. In addition, causative organism of ReA in children may be different from each regions.

Objectives: This article aimed to describe the clinical characteristics and outcome of ReA in children in Thailand.

Methods: A retrospective chart review was performed at the Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand, from January 2005 to December 2017.

Results: Ninety patients (57 M/ 33 F) were identified in this study. Thirty-one (34.4%) of them were diagnosed with transient synovitis of the hip. The mean age was 8.1±4.8 years. The most common clinical manifestation was arthritis (94.4%) following by limping (27.8%). Asymmetrical joint involvement and mono-oligoarthritis was majority found at 86.7% and 85.5%, respectively. Lower extremities involvement including hip, knee and ankle joints was mainly seen. Preceding illness was documented in only half of patients mostly fever and upper respiratory tract infections. Causative organism was generally unidentified. The most common identified causative organism was group A beta-hemolytic streptococcus (13.3%), followed by *Neisseria gonorrhoea* (3%). Fever and elbow arthritis were significantly found in non- group A beta-hemolytic streptococcus group at p=0.016 and p=0.006, respectively. NSAIDs usually

prescribed (73.3%). Almost all patients had favorable outcome at the median time of 20 (8.5-36.5) days.

Conclusion: Most of ReA in children was transient synovitis of the hip. Causative agents were generally unidentified. Poststreptococcal ReA was the leading recognized cause of ReA in children.

