

LOW PREVALENCE OF METHICILLIN-RESISTANT *STAPHYLOCOCCUS AUREUS* IN PEDIATRIC SKIN AND SOFT TISSUE INFECTIONS IN THAILAND

Siriwan Wananukul¹, Tomorn Santatipayunkul¹, Susheera Chatproedprai¹,
Therdpong Tempark¹ and Tanittha Chatsuwana²

¹Department of Pediatrics, ²Department of Microbiology, Faculty of Medicine,
Chulalongkorn University, Bangkok, Thailand

Abstract. Skin and soft tissue infection (SSTIs) due to methicillin-resistant *Staphylococcus aureus* (MRSA) are an important public health problem among children. We aimed to determine the prevalence of MRSA among children with SSTIs who presented to King Chulalongkorn Memorial Hospital in order to inform empiric treatment. We conducted a prospective study among children aged <15 years who presented during June 2015 to March 2016 with a SSTI. In each subject a swab for culture and sensitivity was obtained from the skin lesion, normal skin, and the anterior nares. A total of 102 patients were included in this study. Forty-seven percent of subjects had a history of atopic dermatitis (AD). Sixty-one patients (60%) had a positive culture. *Staphylococcus aureus* was the most common organism isolated (85%), followed by coagulase-negative *Staphylococcus* (6%), *Streptococcus pyogenes* (5%), *Escherichia coli* (2%) and *Pseudomonas* spp (2%). MRSA was found in 3 patients from the skin lesions, 1 patient from normal skin, and 4 patients from the anterior nares. All patients with MRSA infection had moderately severe AD. All MRSA isolates were susceptible to trimethoprim-sulfamethoxazole, gentamicin, ciprofloxacin, fusidic acid, moxifloxacin and doxycycline. We found a lower prevalence of MRSA among study subjects. Effective antibiotics included trimethoprim-sulfamethoxazole and fusidic acid. Among children aged ≥ 12 years, ciprofloxacin and doxycycline are also treatment options. However our findings suggest empiric coverage for MRSA among our study population with SSTIs is not necessary for initial treatment.

Keywords: *Staphylococcus aureus*, methicillin-resistant, skin and soft tissue infection, children, atopic dermatitis

Correspondence: Prof Siriwan Wananukul,
Department of Pediatrics, Faculty of Medicine,
Chulalongkorn University, Bangkok 10330,
Thailand.

Tel: +66 (0) 2256 4951; Fax: +66 (0) 2256 4911

E-mail: siriwanwananukul@yahoo.com