Haemophilus influenzae type b pyogenic arthritis: A review of five cases

Hiroya Kakura 1, 2, Eiji Ohta 1, 2, Mariko Morii 1, 2, Tatsuki Miyamoto 1, 2, Shinichi Hirose 1, 2

1) Division of Neonatology, Center for Maternal, Fetal and Neonatal Medicine, Fukuoka University Hospital
2) Department of Pediatrics, Faculty of Medicine, Fukuoka University

Abstract

Haemophilus influenzae type b (Hib) pyogenic arthritis accounts for 7.6% of all cases of Hib systemic disease in children. Before Hib vaccination, Hib was the most common pathogen in pyogenic arthritis among patients less than 2 years of age.

We reviewed five patients with Hib pyogenic arthritis who were admitted to our hospital from January 2000 to December 2016. All patients were found to have been infected between 2000 and 2007. The patient age ranged from 6 to 22 months. All patients had only a single affected joint, and the location was restricted to the lower extremities (3 hips, 2 knees). Three of the five patients had positive joint culture findings, and three of four (one was not tested) had positive blood culture findings. Of the Hib cases in our study, 60% were resistant to ampicillin. One of the five also had Hib meningitis, but neither concurrent osteomyelitis nor otitis media were found in any of the patients.

Most Hib cases were drug-resistant in our study. However, an Hib vaccine has been approved since 2008, and we found no Hib pyogenic arthritis cases from 2008 to 2016, which may reflect the effect of the Hib vaccine. We therefore believe a key to prevention is the use of Hib vaccination.

Key words: ActHIB®, routine immunization, bacterial meningitis, sequela