Epidemiology of liver abscess in Thailand during the past decade
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Background: Liver abscess is still a common illness in clinical practice in Asia including Thailand. Amoebic liver abscess had been reported more common than pyogenic in origin during the past several decades. We aimed to determine epidemiology among patients with liver abscess in the era of advance diagnosis and therapeutic intervention.

Methods: A retrospective cohort study was conducted in adult patients who were admitted in Ramathibodi Hospital during 2000-2010.

Results: A total of 197 patients were included in the analysis with median age (IQR) of 52.7 (39.6-65.4) years old and 133 (67.5%) male. There were 131 (66.5%), 28 (14.2%), 6 (3.0%), 32 (16.4%) patients were definite diagnosis of pyogenic, amoebic, mixed, and indeterminate of liver abscess, respectively. Most common organism recovered from blood culture was K. pneumoniae (17%). Of these, 134 (68.0%) patients had underlying condition; diabetic mellitus were the majority (26.4%) followed by status post hepatobiliary procedure (21.8%). Patients with pyogenic liver abscess were older (53.6 vs. 38.8 years, p <0.001), had higher proportion of underlying disease (77.9% s. 17.9%, p <0.001), higher proportion of status post hepatobiliary procedure (27.5% vs. 0%, p = 0.001). For clinical presentations, patients with pyogenic liver abscess had lower proportion of abdominal or epigastrum pain (55.0% vs. 78.6%, p = 0.021), hepatomegaly (89.3% vs. 64.9%, p = 0.011), and systemic inflammatory response syndrome (75.0% vs. 46.6%, p = 0.006). For laboratory investigations, patients with pyogenic liver abscess has higher band form (5 vs. 1.5%, p = 0.031), lower platelet (274,000 vs. 35,500/mm3, p = 0.009), and higher blood sugar (135 vs. 108 mg/dL, p = 0.018). There was no statistically significant different in radiologic findings. Median total of antibiotics for treatment pyogenic liver abscess were longer than amoebic liver abscess (61 vs. 37.5 days, p = 0.031). Higher complications were found in pyogenic liver abscess than amoebic liver abscess (33.6% vs. 10.7%, p = 0.021). Overall mortality rate was 8.6% and there was no different in mortality between the 2 groups.

Conclusion: Pyogenic liver abscess was becoming a more common than amoebic in origin. Knowing the difference between patients with amoebic and pyogenic liver abscess may guide physician to make differential diagnosis and offer prompt treatment to the patients.

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Sulbactam sodium/ampicillin sodium (SBT/ABPC) 3 g, QID for the treatment of moderate to severe community-acquired pneumonia (CAP): the first evidence from Japan
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Background: SBT/ABPC 3 g, QID is approved by regulatory authorities and widely used for moderate to severe community-acquired pneumonia (CAP) in the EU, USA, China, and South Korea but not in Japan. However, there had been no evidence for efficacy and safety of SBT/ABPC 3 g, QID from clinical trials for moderate to severe CAP worldwide. We conducted the first phase 3 trial of SBT/ABPC 3 g, QID in Japanese adults to evaluate efficacy and safety in moderate to severe CAP.

Methods: This was a multicentre, open label study. SBT/ABPC 3 g, QID was administered intravenously for 3 to 14 days in 47 adults with moderate to severe CAP. Clinical and bacteriological parameters were assessed at baseline, end of treatment (EOT), test of cure (TOC) and long-term follow-up (LTFU). Causative organisms were isolated from clinical specimens for susceptibility tests. Blood samples were obtained from all the patients to conduct population pharmacokinetic and pharmacodynamic analysis.

Results: A total of 47 subjects were assigned to treatment in this clinical study, and all of them received SBT/ABPC 3 g, QID. Of these, 28 subjects (59.6%) had identified causative pathogens. The most common single or multiple baseline causative pathogens identified were Streptococcus pneumoniae (n = 14), Haemophilus influenzae (n = 9) and Moraxella catarrhalis (n = 8). The clinical efficacy rate at TOC by major causative pathogens was 92.3% in subjects with S. pneumoniae, 83.3% to 100% in subjects with H. influenzae, and 87.5% in subjects with M. catarrhalis. The bacterial eradication rates at TOC by major causative pathogens were 90.0% for S. pneumoniae, 75.0% for H. influenzae, and 87.5% for M. catarrhalis. The clinical efficacy rate at TOC, primary endpoint, was 94.6%. In addition, percentage of time above MIC of 50% or higher for all the MIC values reported in this study (i.e. 0.06 to 16 μg/mL) was obtained for the QID regimen. All adverse events were mild or moderate in severity.

Conclusion: SBT/ABPC 3 g, QID demonstrated excellent clinical and bacteriological effects on moderate to severe CAP. SBT/ABPC 3 g, QID was well tolerated in the treatment of moderate to severe CAP in Japanese.

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