

지역사회 획득 급성 신우신염 환자의 원인균 및 Ciprofloxacin 내성의 변화와 이에 영향을 미치는 인자

경상대학교병원 신장내과

전대홍, 강여진, 서정우, 배은진, 박동준, 장세호, 김현정

Causative Organisms and Antibiotics Susceptibility in Patients with Community Acquired Acute Pyelonephritis

Dae-Hong Jeon, Yeojin Kang, Jong Woo Seo, Eun Jin Bae
Dong Jun Park, Se-Ho Chang, Hyun-Jung Kim

Division of Nephrology Department of Internal Medicine Gyeongsang National University Hospital

Purpose: Over the 10 years, ciprofloxacin has been used as one of antibiotics of choice for the empirical treatment of community-acquired acute pyelonephritis (APN). Recently, however, some studies show that ciprofloxacin-resistant *E. coli* is increasing in APN. This study investigated the clinical characteristics of patients, causative organisms and annual change of antibiotics susceptibility to each antibiotics, associated factors that influence the ciprofloxacin resistance, and appropriate choice of initial antibiotics afterward.

Patients & methods: The records of 356 patients who visited Gyeongsang National University Hospital emergency room from Jan 01, 2000 to Dec 31, 2009 and diagnosed as APN were reviewed retrospectively.

Results: Complicated APNs were 150 out of 356 patients, and diabetes ranked highest as 26.7% (95/356). According to the urine or blood cultures, the patients with isolated microorganism reached up to 60.4% (215/356) and *E. coli* occupied 84.2% (181/215) out of the isolates. Among the antibiotics chosen initially, ciprofloxacin was most common (75.0%, 267/356) and the third generation cephalosporin was next (23.0%, 82/356). The analysis of antibiotics sensitivity among 181 *E. coli* isolates, demonstrated that ciprofloxacin susceptibility was 81.8%. And in the recent 3 years, from 2007 to 2009, ciprofloxacin susceptibility was 87.7% and this was higher than the years before 2007 (77.8%). When the ciprofloxacin-resistant bacterium was isolated, the patients tended to have a higher proportion of complicated APNs, especially, complicated by diabetes mellitus or urinary anatomical abnormalities.

Conclusion: Ciprofloxacin is still effective as initial antibiotics of choice for community-acquired APN, but it should be used carefully in case of the patients having diabetes mellitus or urinary anatomical abnormalities.

Key Words: 급성 신우신염, 대장균, 항생제

Acute Pyelonephritis, *Escherichia coli*, Ciprofloxacin