KSN 2016 Abstract Submission

Clinical Nephrology

KSN2016ABS-1235

Features of headache in acute pyelonephritis patients

Bong Soo Park*[1], Sihyung Park[1], Yoo Jin Lee[1], Chang Min Heo[1], Yang Wook Kim[1]

[1]Internal medicine, nephrology service, Inje university Haeundae Paik Hospital, BUSAN, Korea, Republic Of

Background: Physicians commonly encounter patients with acute pyelonephritis (APN) who complain of headache which should be ruled out meningitis in clinical practice. If physicians know the associated factor with headache attributed to APN, unnecessary invasive procedure can be reduced. However, to our knowledge, there have been no studies describing headache attributed to acute pyelonephritis.

Methods: The APN patients who were over 18 years old and admitted to hospital were included as retrospective study. Patients were divided two groups by presence of headache and groups' differences were analyzed using demographic and laboratory profiles as independent variables. Additionally, correlation analysis was performed between severities of headache using visual analogue scale (VAS) score and demographic and laboratory profiles including age, white blood cells (WBC), and C-reactive protein (CRP).

Results: Among 479 patients, 97 patients (20.2%) developed headache attributed to APN. Patients with headache attributed to APN were younger, female, and had a lower incidence of diabetes. However, laboratory profiles that reflected the severity of APN were not predictive factors for headache attributed to APN. Multiple logistic regression analysis demonstrated that young age and non-diabetes were independently significant variables for the prediction of headache attributed to APN. In addition, the VAS score was found to be negative correlated with age, whereas it was not correlated with WBC and CRP.

Conclusion: Headache attributed to APN is more common in non-diabetic, young, female patients. We could reduce unnecessary invasive procedure with this knowledge in APN patient with headache.

Keywords: headache, meningitis, pyelonephritis