

Could mean platelet volume be a new indicator of progression of chronic kidney disease?

순천향대학교 의과대학 부천병원

*주혜영, 허순미, 박무용, 최수정, 김진국, 황승덕

Background: Mean platelet volume (MPV), an indicator of platelet activation and function, is a newly emerging risk factor for atherosclerotic disease, especially acute myocardial infarction and ischemic stroke. Larger platelets are metabolically more active and release more thromboxane-A₂, serotonin, β -thromboglobulin, and adhesion molecules. MPV has hardly been investigated in patients with chronic kidney disease (CKD). We aimed to investigate the relationship between MPV levels and the glomerular filtration rate (GFR) in patients with CKD. **Methods:** We reviewed the patients with CKD visiting the nephrology outpatient clinic at Soonchunhyang university Bucheon hospital between January 2010 and May 2013. A total of 580 patients were included in the present retrospective study. According to estimated GFR calculated by the abbreviated MDRD equation, the patients were allocated to group 1 (GFR 60-89 ml/min, n=65), group 2 (GFR 30-59 ml/min, n=288), group 3 (GFR 15-29 ml/min, n=149), and group 4 (GFR<15 ml/min and non-dialysis, n=78). **Results:** The MPV values had a negative correlation with the GFR in patient with CKD (Pearson's correlation coefficient=-0.549, $p<0.001$). The mean MPV values in the group 1 to 4 was 9.76 ± 0.59 fL, 10.25 ± 0.73 fL, 10.77 ± 0.74 fL, 11.28 ± 0.69 fL, respectively. Multiple comparison of MPV values for the four group by Tukey HSD's test showed statistically significant intergroup differences with a p -value of <0.001 , and after adjusted by the confounding variables, too. **Conclusions:** MPV values were significantly increased with progression of CKD stages. Increased MPV may be a possible cause for increased cardiovascular and cerebrovascular risk in patients with CKD.

Coexisting polymorphic and monomorphic lymphoproliferative disorder in renal transplant recipient.

Chungnam National University Hospital

*Ki Dae Kim, Kang Ryun Moon, Ye Jin Kim, Sarah Chung, Dae Eun Choi, Ki Ryang Na, Kang Wook Lee, Young Tai Shin

Post-transplant lymphoproliferative disorder (PTLD) in renal transplant recipients has been reported to about 1-3%. PTLDs are classified as polymorphic PTLD, monomorphic PTLD, and other rare types. Although PTLD involves many organs, including the lymph node, lung, gastrointestinal tract, and central nerves system, it is rare that polymorphic PTLD and monomorphic PTLD coexist in renal transplant recipient. We report a rare coexistence of polymorphic PTLD of lung with monomorphic PTLD of small bowel in renal transplant recipient. **Case:** A 13-years-old girl was admitted to the hospital with the chief complaint of abdominal pain. When she was a newborn, she was diagnosed as Vater syndrome. She started peritoneal dialysis when she was 10 years old, and received a kidney from a deceased donor 8 months ago. She was taking prednisolone 5 mg once, tacrolimus 1.5 mg twice and mycophenolate mofetile 180 mg twice per day. On admission day, there was tenderness and rebound tenderness on whole abdomen. Free air under both diaphragms was found on abdominal radiograph and lung mass was found on chest radiograph. Emergent segmental resection of small intestine and double barrel stomy was done. Histologic diagnosis of small bowel lesion was confirmed as PTLD, monomorphic B-cell type, and EBV in-situ hybridization was positive in most neoplastic cells. Wedge resection of the lung mass was performed. And histologic diagnosis of lung mass was polymorphic PTLD. We started weekly administration of rituximab ($325 \text{ mg/m}^2/\text{week}$). Lung nodules were significantly decreased in size on last follow up CT scan without significant complication after 4th dose of rituximab