

**Abstract Type : Poster**  
**Presentation No. : PAK 038**

### **Acute kidney injury of nephrotic syndrome in children : Retrospective study**

**Mi Young Kim**, Myung Hyun Cho, Hye Sun Hyun, Eujin Park, Il-Soo Ha, Hae Il Cheong, Hee Gyung Kang  
Department of Pediatrics, Seoul National University Hospital, Korea, Republic of

**Objectives:** Nephrotic syndrome is most common kidney disease in children. Acute kidney injury (AKI) is one of the common complications of nephrotic syndrome, and its incidence is reported from 1% to 50.9% in various studies worldwide. Well known risk factors of AKI are intravascular volume depletion, infection, edema and genetic disease. However there is no detailed report about incidence and risk factors of AKI in pediatric nephrotic syndrome in Korea. So we studied incidence, causes, risk factors of AKI in children with nephrotic syndrome.

**Methods:** We conducted a retrospective review of the electronic medical records of pediatric patients who were admitted to Seoul National University Children's Hospital for occurrence or recurrence of idiopathic nephrotic syndrome, from January 1<sup>st</sup>, 2015 to July 31<sup>th</sup>, 2017. Patients with chronic kidney disease or congenital nephrotic syndrome were excluded.

**Results:** During the study period, 90 cases (Male:Female 59(65.6%):31(34.4%)) were admitted for management of nephrotic syndrome. Among them, 17 cases met the KDIGO criteria of AKI (18.9%, Male:Female 11(64.7%):6(35.3%), average age 10.2+/-6.0). AKI developed in association with dehydration(4), infection(3), aggravation of nephrotic syndrome(6) and methyl prednisolone pulse therapy(4). Those with AKI were not different statistically from those without AKI in regard of sex, age, pathological diagnosis, age of nephrotic syndrome onset. However concurrent medication at the time of AKI were different; AKI occurred more common when the patients taking cyclosporine (70.6% with cyclosporine, p=0.016, odds ratio=3.857)

**Conclusions:** Acute kidney injury were 18.9% of total hospitalization and various causes and risk factors were found. Because the incidence of acute kidney injury is high, we should consider acute kidney injury while managing high risk nephrotic syndrome patients.