Methods This prospective study includes 140 children less than 2 years, 64% females admitted for febrile UTI. PCT levels were measured at diagnosis and DMSA scan at the 6 months. We use a study of diagnostic test assessing their sensitivity and specificity. ROC curve was performed.

Results Abnormal DMSA was found in 14 infants (11.3%). Using a cutoff value of 0.6ng/ml. PCT sensitivity for detect renal scars on DMSA was 57.1% (95%CI, 31.2–83.1%) and specificity was 56.1% (95%CI, 46.7–65.5%). Negative predictive value was 90.9% (95%CI, 84–97.8%). AUC (area under curve) is 0.582.

Conclusions We can conclude that PCT yields a high negative predictive value of renal damage. Therefore a low PCT value at the time of admission points out a low risk of renal scarring.

1205 INCIDENCE OF ACUTE POST STREPTOCOCCAL GLOMERULONEPHRITIS IN CHILDREN
doi:10.1136/archdischild-2012-302724.1205

AIM: To present a number of children with set diagnosis of APSGN in the Pristina Children’s Clinic, incidence, clinical characteristics of the disease an treatment. Their follow up aimed to determine the further course of the disease and the possibility for progressing into a chronic form.

Materials and Methods This was an analysis of the children treated in the Pristina Children’s Clinic during 2009–2011. General date has been taken from all hospitalized patients, including: age, gender, parental’s profession, residence and dwelling condition. The diagnosis of APSGN was set in 98 children based an anamnestic date for existing a prior streptococcal infection, characteristic clinical picture, as well as laboratory analyses (hematemia, proteinuria, titer of ASO, determination of the serum creatinin and urea and concentration of C3 and C4).

Results From 98 patients, witch is the total number of the examinees, the majority belonged to the 7–11 year old group, will the male patients were more frequent. According to the obtain anamnestic date, 82% cases had and anticipatory throat infection. In all cases, the clinical symptoms were hematemia and/or proteinuria. Hypertension was present in 73% cases, while edema was confirmed in 79% of the hospitalized patients. Positive ASO titer was confirmed in 75,8 % cases.

Conclusion In a larger number of our patients, i.e. in 96,5 % a complete recovery was obtained with further ambulence follow up, and only 3,5% entered into the form of chronic glomerulonephritis.

1207 TREATMENT AND DIAGNOSIS OF THE NEPHRITIC SYNDROME IN CHILDREN
doi:10.1136/archdischild-2012-302724.1207

BACKGROUND AND AIDS Nephritic syndrome (NiS) is of significant concern in Pediatric Nephrology with high progression rate. Aim of our study was to establish the pathohistological pattern, and assessment of mofetil mycophenolate efficacy (MMP) in comparison with cyclophosphamide (CYC) in children with NiS.

METHODS Study was conducted in 27 children (16 boys) with chronic NiS. Kidney biopsy was performed in all patients under US-guidance using biopsy gun. Pathohistological investigation of renal biopsy included: light, immunofluorescent and electron microscopy.

RESULTS Most frequent pathohistological variant was IgA-nephropathy (IgA-NP) (74.1%, p<0.001). In 14.8% patients NiS was associated with hereditary nephritis. Membranoproliferative glomerulonephritis (GN) (3.7%), and extracapillary GN (3.7%) were observed rarely. To induce the remission we used IV methylprednisolone for 3–6 days, oral prednisolone (Pred) 60 mg/m²/day, MMP 1 g/m²/day for 3–4 months. Remission was established when proteinuria was decreased to 0.5 g/day. Maintenance therapy was administered for one year or longer. Controls were administered with IV (3–4 pulses) or oral (for 2 months) CYC, Pred 60 mg/m²/day for 1.5–2 months with following alternating schedule. All patients have received ACE inhibitors. Proteinuria was significantly (p<0.05) lower in main group (0.1 g/day) in comparison with controls (0.9 g/day), and GFR increasing was more prominent in main group (from 64.3 to 98.7 ml/min/1.73m²), than in controls (from 68.5 to 59.1 ml/min/1.73m²) (p<0.05).

CONCLUSIONS Thus, chronic nephritic syndrome in children was mostly associated with IgA-nephropathy. Combination treatment with mycophenolate mofetil + steroids and ACE inhibitors is more effective and safe than cyclophosphamide treatment.

1208 NEW BIOMARKERS IN SCREENING AND DIAGNOSIS OF VESICOURETERAL REFUX

doi:10.1136/archdischild-2012-302724.1208

Background and Aims Vesico-ureteral reflux (VUR) is of major concern in Pediatric Urology because of the increased risk of recurrent pyelonephritis and pyonephrosis, including pyelonephritic scarring and the development of hypertension. The aim of our study was to identify new biomarkers able to help in the diagnosis of VUR.

Methods The statistical concordance between the definitions was evaluated using the Cohen’s Kappa coefficient and their association with mortality using uni- and multivariable logistic regression. AKI definitions were adjusted for each other and for GA, BW and Apgar score.

Results Among 263 VLBW infants, 28 (10.6%), 40 (15.2%) and 26 (9.9%) met the definition for AKI-1, AKI-2 and AKI-3 respectively. Low agreement was shown between AKI-1/AKI-2 (Kappa 0.43, 95%CI:0.27–0.59) and AKI-1/AKI-3 (Kappa 0.52, 95%CI:0.14–0.51). Substantial agreement was observed for AKI-2/AKI-3 (Kappa 0.69, 95%CI:0.56–0.82).

68/263 patients died (28.8%), with AKI-1 45.1%, AKI-2 32.5% and AKI-3 26.9% respectively.

AKI patients run higher risk of death than the others (Crude OR 15.6 [P<0.001], 6.7 [P<0.001] and 3.8 [P=0.007] for AKI-1, AKI-2 and AKI-3).

Using multivariable model, AKI-1 and AKI-2 remained associated with higher mortality (OR 4.25 [P=0.008] and OR 3.70 [P=0.041]).

Conclusions Different AKI-definitions lead to substantially different patients classifications. Even minimal increment of creatinine are associated with augmented risk of death among VLBW infants.