necessary, based on clinical history and physical examination, and whenever possible serological tests (ANCA and anti-GBM), to start immunosuppressive therapy to interrupt fatal course of lung and kidney complications.

Background and aims  Fetal hydronephrosis is the most common anomaly detected on prenatal ultrasound examination. Several algorithms exist for its management but it remains controversial until now. Here we present our experience in management and outcome of the patients with prenatal hydronephrosis.

Methods  In this study 160 known cases of prenatal hydronephrosis were evaluated for detecting underlying aetiology. We carried out renal and bladder sonography and voiding cystourethrography (VCUG) for all patients and DTPA scan in cases with suspicion of obstruction.

Results  Of 160 cases of prenatal hydronephrosis 75% were boys and 25% were girls. The median duration of postnatal follow up was 21.5 months (3 months to 36 months). The most common detected abnormalities were ureteropelvic junction obstruction (UPJO) 90 patients, vesicoureteral reflux (VUR) 46 patients, posterior urethral valve (PUV) 15 patients respectively. Nine patients had neurogenic bladder. Prenatal hydronephrosis were unilateral in 83.2% (133 cases). In these cases 57% were on the left side. The grade of reflux was severe in 20 renal units (36.4%), moderate in 24 renal units (43.6%), and mild in 11 renal units (20%). During the follow up period 50 cases (31.25%) resolved spontaneously. 34 cases (21.25%) underwent surgery and 76 (47.5%) are still under medical treatment.

Conclusions  It is highly suggested to do standard VCUG in all boys with prenatally hydronephrosis to detect PUV and neurogenic bladder. Additionally, renal sonography in all cases of congenital hydronephrosis were evaluated for detecting underlying aetiology. We carried out renal and bladder sonography and voiding cystourethrography (VCUG) for all patients and DTPA scan in cases with suspicion of obstruction.

Background and aims  The study of the factors that are in favour and determine the urinary tract infections (UTI) in children hospitalised in Clinic II Paediatrics, SCJU Craiova, between 1.01.2012–31.12.2013.

Material and method  213 children: 48 (22%, 5%) infants, 25 (11.7%) 1–3 years, 31 (14.6%) 3–6 years, and 109 (51.2%) > 6 years.

Results  UTI accounted for 4.4% of all hospital admissions.

Distribution by sex (M:F): Infant 33/15, 1–3 years 17/8, 3–6 years 14/17, > 6 years 27/82; medium of origin Urban/Rural: Infant 26/22, 1–3 years 11/14, 3–6 years 14/17, > 6 years 42/67.

Favouring factors – Urinary tract abnormalities: phimosis 13 cases, hydronephrosis 12, 11 with kidney stones, vesicoureteral reflux 5 children, and pielocalical duplication in 5 children, 4 with hypospadias, congenital kidney in 2; vulvovaginitis in 9; oxiriuria in 8; constipation in 7; poor hygiene at 15.

Bacterial determinant factors: E Coli in 118, Proteus in 28, 25 with Klebsiella, Enterobacter in 13 Pseudomonas aeruginosa in 10; viral causes in 19 cases (acute viral haemorrhagic cystitis).

Conclusion  1. UTI were more common in males in infants and children >1 year and as for the females in children between 3–6 years and > 6 years; 2. E coli was the determining factor in over 50% of the cases. 3. Urinary tract anomalies favoured about ¼ of the cases.

Background and aims  The present study aimed to assess whether urinary profiles of the following lysosomal exoglycosidases: N-acetyl-β-hexosaminidase (HEX), its isoenzymes A (HEX A) and B (HEX B), α-fucosidase (FUC), β-galactosidase (GAL), α – mannosidase (MAN), and β – glucuronidase (GLU) are useful biomarkers of tubular dysfunction in children with solitary functioning kidney (SFK).

Methods  We measured HEX, its isoenzymes HEX A, HEX B and FUC, GAL, MAN, GLU urinary activity in 52 patients with SFK. Patients were subdivided in two groups: congenital SFK (cSFK) - unilateral renal agenesis and acquired SFK (aSFK) - unilateral nephrectomy. The reference group (RG) contained 60 healthy children sex and age matched.

Results  Urinary activity of all exoglycosidases in SFK was significantly higher than in RG (p < 0.05). There was no difference in exoglycosidases activity between cSFK and aSFK (p > 0.05). HEX, its isoenzymes HEX A, HEX B negatively correlated with eGFR, and all estimated parameters correlated positively with albumin/creatinine ratio (p < 0.001).

Conclusion  Urinary activity of HEX, its isoenzymes HEX A, HEX B, FUC, GAL, MAN, and GLU is elevated in children with SFK. Long-term follow-up studies in larger groups of children with SFK may help us better understand their clinical significance.

Background and aims  The study of the factors that are in favour and determine the urinary tract infections in children: 1. UTI were more common in males in infants and children >1 year and as for the females in children between 3–6 years and > 6 years; 2. E coli was the determining factor in over 50% of the cases. 3. Urinary tract anomalies favoured about ¼ of the cases.