analysis for adverse outcome with the aim to develop a model that could be utilised in both the tertiary and regional setting to identify neonates at risk of poor outcome.

Results: The scoring systems developed by Portman and Talati in this study, were not found to be highly predictive of outcome with maximum positive predictive values of 83.3% and 60.0% respectively. In our cohort, a model scoring hypoxic-ischaemic encephalopathy, number of organs damaged and need for extra cardiac massage were found to be better predictors of outcome with a positive predictive value of 90.0%.

Conclusion: The proposed scoring system was a better predictor of outcome in this cohort of near-term infants after PA than previously reported scoring systems proposed by Portman or Talati. This scoring is also applicable in the non-tertiary setting and should be validated in a prospective group of patients.

352

FEBRILE URINARY TRACT INFECTION IN INFANTS. IS CYSTOURETHROGRAPHY NECESSARY?

B. Orive¹, L. Madariaga², I. Hualde², Á. Marí³, A. Comet⁴

¹Pediatrics, Hospital Txagorritxu, ²Pediatrics,

³Pediatric Radiology, Hospital de Txagorritxu,

⁴Pediatrics, Health Center Zaramaga, Vitoria, Spain

Background and aims: To investigate infants after a febrile urinary tract infection with imaging studies is a common practice. Recently, the tendency is to avoid doing a cystourethrography in this group of risk although vesicoureteral reflux is associated with recurrent UTI and renal scars.

Objective: To evaluate the efficacy of combined DMSA scan and renal ultrasound to predict VUR in infants after a first febrile UTI.

Methods: This prospective study includes 295 infants less than 2 years, 114 males (38'6%) and 181 females (61'4%). A renal US and a DMSA scan were performed after diagnosis, and a voiding cystourethrography 4 weeks later. We assessed sensibility, specificity, positive and negative predictive value, and estimated the odds ratio.

Results: Vesicoureteral reflux was diagnosed in 82 infants (27'7%). 64 of them were low grade (I, II) and 18 were high grade (III, IV, V). In those with low grade, 25% showed abnormal findings in renal US, and 57% in DMSA scan. In those with high grade, 78% showed pathological US, and 69,6% abnormal DMSA scan. Combining both studies, 86'9% of high grade VUR but only 64'4% of low grade VUR showed pathological findings. The odds ratio for high grade reflux was 3'68 (95% CI 0'98-13'87).

Conclusions: In infants presenting with a first febrile UTI, renal US and DMSA scan must be performed during acute illness. Cystourethrography would then be indicated when renal US, DMSA scan or both were pathological. However, the value of these imaging studies for predicting low grade reflux is limited.

353

THE VNTR *IL1RN* GENE POLYMORPHISM IN POLISH CHILDREN WITH DIFFUSE MESANGIAL PROLIFERATION (DMP)

K. Skonieczna¹, H. Marciniak², A. Bińczak-Kuleta¹, M. Drożdżyńska¹, M. Kryształowska¹, J. Peregud-Pogorzelski², M. Litwin³, R. Grenda³, M. Pańczyk-Tomaszewska⁴, M. Roszkowska-Blaim⁴, A. Brodkiewicz², A. Ciechanowicz¹

¹Department of Laboratory Diagnostics and Molecular Medicine, ²Department of Pediatrics, Hematology and Pediatric Oncology, Pomeranian Medical University, Szczecin, ³Department of Nephrology and Transplantology, The Children's Memorial Health Institute, ⁴Department of Pediatrics and Nephrology, Medical University, Warszawa, Poland

Pathogenesis of several renal diseases is strongly connected with cytokines. The polymorphism of *IL1RN* gene exists in intron 2 and is caused by variable number of 86bp sequence repeats. In addition, previous studies confirmed the association of *IL1RN**2 with inflammatory diseases, among them glomerulonephritis. Therefore it raises the question whether VNTR polymorphism of *IL1RN* gene determines the susceptibility to DMP and its clinical course.

The study group consisted of 56 children with DMP and 105 healthy children as controls. Genomic DNA was extracted from peripheral blood leukocytes. The *IL1RN* intron 2 VNTR polymorphism was determined by PCR technique with primers flanking the polymorphic region.