THE INTERNATIONAL REGISTRY FOR NIEMANN-PICK DISEASE TYPE C (NP-C) IN CLINICAL PRACTICE
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1E Serdaroglu, 2S Takci, 3H Kotarsky, 1O Cil, 4E Utine, 2S Yigit, 5,6V Fellman.
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Methods Descriptive data from enrolment are presented for all patients with available data who were included in the Registry as of 19th August 2011.

Results 121 patients have been enrolled. The median (range) age at enrolment was 16.9 (0.9–56.6) years, age at onset of neurological manifestations was 8.2 (1–48.0) years (n=100), and age at diagnosis was 11.8 (0.1–53.9) years (n=110). A history of neonatal jaundice was recorded in 4/4 evaluable patients with early-infantile (EI) onset of neurological manifestations (at age < 2 years; n=9), 6/21 (29%) with late-infantile (LI) onset (at 2 to < 6 years; n=31), 6/21 (29%) with juvenile (JUV) onset (at 6 to < 15 years; n=51), and 3/20 (15%) with adolescent/adult (AA) onset (at ≥ 15 years; n=29). Mglutosyl therapy at enrolment was recorded in 88/121 (73%) patients; mean (SD) exposure was 11.0 (11.5) years (n=86). Neurological manifestations were observed in 71/84 (85%) patients: ataxia (71%), vertical gaze palsy (68%) and dysarthria (62%) were most frequent. Median (range) disability scores (0=normal; 1=worst) were: 0.0 (0.0–0.94) in EI (n=7), 0.29 (0.0–1.0) in LI (n=28), 0.41 (0.15–0.88) in JUV (n=28), and 0.29 (0.06–0.81) in AA-onset patients (n=26). A low proportion of patients had normal language, manipulation, ambulation, and/or swallowing.

Conclusions Over two-thirds of this NP-C cohort had infantile or juvenile onset of neurological manifestations; neonatal jaundice was observed more frequently in these patients versus adolescent/adult-onset patients.

GRACLE SYNDROME IN A TURKISH NEWBORN INFANT CAUSED BY A HOMOZYGOUS MUTATION (P99L) IN COMPLEX III ASSEMBLY FACTOR BCS1L
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1E Serdaroglu, 2S Takci, 3H Kotarsky, 1O Cil, 4E Utine, 1Department of Pediatrics; 2Department of Pediatrics, Division of Neonatology, Hacettepe University, Ankara, Turkey; 3Department of Pediatrics, Clinical Sciences, Lund University, Lund, Sweden; 4Department of Pediatrics, Division of Medical Genetics, Hacettepe University, Ankara, Turkey; 5Department of Pediatrics, Lund University and Skåne University Hospital Lund, Lund, Sweden; 6Department of Pediatrics, University of Helsinki, Helsinki University Central Hospital, Helsinki, Finland

Background and Aim GRACLE syndrome, a neonatal, autosomally recessive disorder found in Finland, featuring growth retardation, aminoaciduria, cholestasis, iron overload, lactic acidosis and early death, is caused by a homozygous mutation (S78G) in BCS1L, the assembly factor for respiratory chain complex III. We investigated a newborn Turkish girl with similar symptoms. Her two sisters with low birth weight, metabolic acidosis, cholestasis and renal Fanconi syndrome, had died at 18 and 105 days age, respectively.

Methods and results The girl was born to healthy nonconsanguineous parents. She was growth retarded (1789 g at term), developed tachypnea and metabolic acidosis on day one. Lactic acidosis, jaundice with direct hyperbilirubinemia, nonspecific aminoaciduria, high phosphaturia, proteinuria and glucosuria were detected. Serum iron (190 mcg/dl), ferritin (2819 ng/ml) and transferrin saturation (99.4%) were increased. Metabolic, cardiologic and sonographic workup were otherwise normal. Because of similarities with GRACLE syndrome, the BCS1L gene was investigated. The Finnish SNP was not found, but gene sequencing revealed a homozygous mutation resulting in an amino acid exchange (P99L) in the protein.

Conclusions The studied infant had a GRACLE-like disorder caused by a different mutation than that in newborns of Finnish ancestry. Most likely the two diseased siblings had the same homozygous BCS1L mutation that previously has been published in three other newborns or Turkish origin. We proposed that P99L-mutation in BCS1L is a Turkish genotype resulting in GRACLE syndrome phenotype, and should be investigated in Turkish newborns with the typical clinical features.

UREA CYCLE DEFECTS- MISDIAGNOSSES AND WRONG DIAGNOSES
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1S Abed. Pediatrics, Nazer Pediatric Hospital, Gaza, Palestinian Authority

Background Urea cycle defects (UCD) constitute a group of rare metabolic disorders that involve the enzymes of every step of urea cycle. Deficiency of one of these enzymes leads to hyperammonemia and they present classically with acute life-threatening neonatal encephalopathy. However, presentation at later childhood or adulthood could also occur. There are many disorders that mimic UCD causing misdiagnosis or wrong diagnosis.

Methods A prospective and retrospective study was made on 10 cases of UCD. Most have been diagnosed at the neonatal period with follow up done through our genetic and metabolic clinic at Nazer Pediatric Hospital.

Results Most of the cases presented with acute ammonia encephalopathy. Age of presentation was variable. Most of the cases were from the Northern Gaza which is of geographical similarity to distribution of the IEM collectively. There was no gender differences.