face, frontal bossing, and low-set protruding ears. His neurologic examination revealed normal muscular tonus and normal deep tendon reflexes with clumsy gait. Metabolic screening tests, including tandem mass, urine organic acids, plasma, and urine amino acid profiles were also normal. The patient underwent MRI of the brain as a firstline investigation, and T2 images demonstrated an extensive involvement of the hemispheric, subcortical white matter with a cerebrospinal fluid intensity signal change suggestive of multilocular giant VRS. MR spectroscopy showed no significant signal peak. The karyotype analysis of the patient was 46 XY, and FISH for Angelman syndrome also revealed a normal result. In the 2-year follow-up, the patient showed no neuromotor deterioration and radiological progression.

In conclusion, VRS must be differentiated from other cystic lesions of the brain. Phenotypic characteristics of our patient were not compatible with the previously defined syndromes.

PO-0807

LONG TERM NEURODEVELOPMENTAL OUTCOME OF PRETERM INFANTS WITH PERIVENTRICULAR-INTRAVENTRICULAR **HAEMORRHAGE**

E Bayram, M Torun Bayram, Y Topcu, S Hiz. Pediatrics, Dokuz Eylul University Hospital, Izmir. Turkev

10.1136/archdischild-2014-307384.1441

Background and aims To determine the neurodevelopmental morbidity of preterm infants with periventricular intraventricular haemorrhage, at the age of 4.

Methods The patients at the age of 4 were evaluated through neurologic examination and motor assessment by a paediatric neurologist and Denver II Developmental Screening Test by a psychologist. The results were compared with Denver II Developmental Screening Test results which had been made at 3-6 and 6-12 months.

Results The total study population consisted of 66 prematurely born children of less than 37 gestational age. When the cases with PVH-IVH were graded with the cranial neuroimaging findings, 62,1% were documented as grade I haemorrhage, 18% as grade II, 6% as grade III and 13.9% as grade IV. Patients with grade III-IV Periventricular Intraventricular Haemorrhage had significantly lower Denver II Developmental Screening Test results at the age of 4, compared with grade I-II Periventricular-Intraventricular Haemorrhage group. Similarly, ≤32 weeks patients had significantly lower Denver II Developmental Screening Test at the age of 4 when compared with >32 weeks patients.

Conclusions Children who were born ≤32 gestational weeks and/or patients with grade III-IV periventricular-intraventricular Haemorrhage have an increased risk of neurologic impairment. All premature infants should be evaluated by Denver II Developmental Screening Test in early childhood period of life.

PO-0808 | THE AFFECT OF APOE GENE POLYMORPHISM ON **NEURO-COGNITIVE FUNCTIONS IN CHILDREN WITH CONGENITAL HEART DISEASE**

¹T Bedir Demirdag, ¹K Gucuyener, ¹AS Soysal, ²NS Guntekin, ¹Z Ozturk. ¹Pediatrics, Gazi University Faculty of Medicine, Ankara, Turkey; ²Genetics, Gazi University Faculty of Medicine, Ankara, Turkey

10.1136/archdischild-2014-307384.1442

Research conducted on children with CHD displays that these children's neurological development is different than the normal population and focuses on the reasons of this difference. Currently, the factor that attains the highest emphasis is the Apo E genotype of the patients. We aimed at revealing the influence of Apo E gene on the neurological development process of children with CHD. Our goal is, predicting the nurological development of children with CHD according to Apo E gene expression, and anchoring the children requiring support, at an earlier stage. We investigated 188 children patients with CHD, in GUTF paediatric cardiology departmentt, between 2009-2013. We documented the socio-demographic parameters. After physical examinations followed by psychometric tests, we examined Apo E genotype on blood samples of the children. Cyanotik patients' motor functions were worse then acyanotic patients (p < 0.05). Patients with VSD got higher points from the WISCR total IQ, compared to the patients who do not have SD. The other psychometric tests on the children did not display any further difference. 78.7% of the patients who were involved in our research classify as E3/E3. Sociocultural and economic status of parents was positively associated with psychometric test results (p < 0.05).

Relevant literature claim that children with CHD display worse neurocognitive functioning compared to normal population, and having Apo E2 allel is a risk factor for it. Apo E4 allel is more related to better psychometric test.

Results However, our results display no influence of ApoE gene on the neurocognitive functioning.

PO-0809

SOCIAL COMMUNICATION QUESTIONNAIRE FACTOR STRUCTURE FOR PRIMARY SCHOOL CHILDREN WITH DEVELOPMENTAL DISORDERS SCREENED AS PART OF AN AUTISM PREVALENCE STUDY

AM Boilson, A Staines, MR Sweeney. Nursing & Human Sciences, Dublin City University, Co. Dublin, Ireland

10.1136/archdischild-2014-307384.1443

Background and aims Explore the factor structure of the Social Communication Questionnaire (SCQ: Rutter et al., 2003) for primary school children 6-11 years, 7951 screened as part of an autism prevalence study identified with diagnosed developmental disorders including Autism Spectrum Disorders (ASDs).

Methods The SCQ is a 40-item parent report questionnaire that asks about characteristic autistic behaviour. It is based on the Autism Diagnostic Interview - Revised (ADI-R: Lord et al, 1994) recommended cut off score for ASDs (>15). Sixty nine percent 5457 of parents completed the SCQ, 7% 411 were identified (males 294, 71%) with parent reported diagnosed developmental disorders: Speech and language 227, 55%; ADHD 64, 16%; ASDs 58, 14%; Dyspraxia 49, 12%; Downs Syndrome 8, 2% other diagnosis 5, 1%.

Results The optimal SCQ cut off score for differentiating ASDs from other developmental disorders was (>13) sensitivity 0.89, specificity 0.81, PPV 0.43, NPV 0.98. Principal Components Analysis revealed 4 factors explaining 49% of the total variance. First factor, 32%: 7 of 10 items, Reciprocal Social Interaction (RSI) ADI-R domain. Second factor 9%, 6 of 8 Restricted Repetitive Stereotyped Behaviour (RRSB) domains third and fourth factors each explaining 4% variation. Four of 6 item's on the third factor (RSI) domain, 4 of 5 on the fourth ADI-R Communication domain.