

B(n=55, 29–32wks). All developmental assessments(206) were applied by one researcher.

Results Mean(SD) Bayley-III composite scores (CSs) percentile ranks, and overall neurodevelopmental impairment (NDI 24mo) (%) for the 2 groups are shown in the table; there were no differences in CSs in any Bayley III domain in and between groups. Although not significant, ELBW showed a decrease and VLBW an increase in CSs over time. The only difference between groups was in the motor domain regarding percentile ranks and overall NDI rates(table). A significant correlation was found between: 12th mo neuroexam with all the Bayleys subscales (p<0.001).

		cognitive	language	motor	Social emotion	adaptive
Group A: n=45	12mo CSs	94(18)	92(16)	87(17)	100(15)	102(34)
	24mo CSs	90(20)	90(19)	85(14)	107(20)	90(19)
	%rank12mo	37.7(30)	32.2(26)	29.1(23)	41.6(32)	43.2(32)
	%rank24mo	33.6(30)	29.8(28)	22.1(21)*	59.4(34)	35.4(3)
	NDI 24mo(%)	48	37.5	56**	23	39.3
Group B: n=55	12mo CSs	92(21)	91(17)	89(17)	104(17)	96.5(21)
	24mo CSs	94(24)	88(23)	92(28)	109(19)	92(21)
	%rank12mo	38.7(31)	35.7(29)	33.5(28)	57.7(35)	46.6(34)
	%rank24mo	42.7(34)	33.2(31)	39(35)*	62.5(33)	38.9(33)
	NDI 24mo(%)	31	33	36**	18	35

*p=0.001, **p=0.04

Abstract 1245 Figure 1

Conclusion In our cohort Bayleys III composite scores seems to be stable in serial examinations; however are lower to those reported. ELBW infants at 24mo showed a delay in the motor domain. Comparison with a control group is deemed necessary.

1246 NEURODEVELOPMENTAL OUTCOME OF TRIPLETS AFTER IN VITRO FERTILIZATION OR NATURAL CONCEPTION

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Background and Aims Triplets may have adverse neurodevelopmental outcome. Parents are advised to fetal reduction, and they often opt to reject it.

The Aim of our study is to present triplets' neurodevelopmental outcome in our "follow-up" program.

Methods We review medical records of triplet pregnancies in our institution. All children were evaluated with Griffiths Mental Developmental Scales (GMDS-ER). Parents were asked to express their feelings about having a triplet delivery.

Results Twenty one triplets were identified. Two pregnancies (6/21 triplets) (28.57%) were conceived after hormonal replacement and 5/7 pregnancies (15/21 triplets) (71.42%) after IVF. Mean maternal age was 33.85 years (range=30–44y). Intra Cytoplasmic Sperm Injection was used in all IVF pregnancies. Mean number of cycles 1.8 (range=1–3). All but three were fresh embryo transfer. One IVF cycle was from donor oocyte. Mean GA at birth was 33 weeks (range=31–35wks). Mean BW was 1852gr (range=1540–2200gr). One IUGR neonate was excluded. Three neonates (14.28%) had mild RDS. Three neonates (from the same IVF pregnancy with donor oocyte) had mobile CP (14.28%). Cognitive tests were within the normal range in 17/21 triplets (80.95%). Two siblings, not from IVF pregnancy, were highly suspected for ASD and two triplets (one with CP) had mild developmental delay. All parents with IVF history were happy with their choice to continue with triplet pregnancy.

Conclusion In our population triplet pregnancy ended in moderate preterm delivery. Cognitive outcome was within the normal range in the majority of our population. Adverse neurodevelopmental outcome was not necessarily related to the mode of conception.

1247 BAYLEY INFANT NEURODEVELOPMENTAL SCREENER (BINS) IN BRAZILIAN PRETERM CHILDREN UNDER RISK CONDITIONS

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Preterms are always at risk for neurological abnormalities and developmental delays. Underdevelopment country children face multiple adversities and are subjected to biological and social risk factors, fighting daily against mortality.

This research purpose was investigating Bayley Infant Neurodevelopmental Screening - BINS (Aylward, 1995) psychometric properties and its effectiveness while screening Brazilian children.

BINS was administered to 61 children, low-income families, Brazilian unified health system users, in 2 groups: 31 children-12 months (12m) and 30 children-24 months (24m), both sexes, birth weight < 2000g.

Neurologists examined them through *Amiel-Tison* and *Denver-DDST-II* and psychologists screened them with *BINS-12m/24m* and *Bayley Scales-BSID-II*, golden standard instrument.

BINS is a low cost fast screening instrument. It takes 10 minutes to be administered. Consists of 11–13 items and assesses cognitive processes, receptive, expressive functions and basic neurological functions/intactness. The items failed, shows the levels of risk: low, moderate or high risk for neurological impairment or developmental delay.

Sociodemographic aspects and birth risk conditions presented homogeneous characteristics. From 61 infants screened, 54 were eligible for the Early Intervention Program in Brazil: 30 infants(12m) and 24 infants(24m). Children were referred to specialists (developmental pediatricians, neurologists, optometrists, speech pathologists, psychologists).

BINS reliability indexes were over requested standards. Validity evidences based on external variables were positive moderated and BINS(24 m)/BSID-II (mental) presented high correlation. Validity evidences based on content were attested by expertise. High sensitivity was found.

BINS is a satisfactory screening tool and presents adequate psychometric properties. It's also able to screen children under biological and social risk conditions.

1248 FAMILY THERAPY AND EDUCATION BY OCCUPATIONAL THERAPIST FOR THE CHILDREN WITH AUTISM: EVALUATE CHILD'S LEARNING FROM CAREGIVER'S PERCEPTION

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Background Various aspects of the home literacy environment are considered to stimulate the emergent development of learning process in children with disabilities. It is important to gain insight into the learning environment of children with Autism through parents' education. Parents' education and its implementation are very important for creating learning environment at home for the children with Autism.

Aim of the study To evaluate child's (Autism child) learning at home from caregiver's perception after receiving family therapy and education from Occupational Therapist.

Methodology Data were generated through focus group discussion by using semi-structured questionnaire. In focus group, discussion was guided by researcher and two other assistants. Participants of the research were selected by using purposive sampling. Generated

data were analysed through content analysis by doing category, code and prepare theme.

Result and discussion After receiving family therapy and education, parents are able to gain a good knowledge about their child's condition. They also learned how to make their child able in doing functional activities such as self care, study and play activities by using structured home environment with daily visual schedule, some sorts of sensory stimulation, visual timing, using sign of toilet, dining, kitchen etc. Through doing these activities with family members, their children are able to learn about timing of doing things, sequence and steps of doing activities.

Conclusion Parents find it helpful to create a friendly environment for their children at home by family therapy and education.

1249 DEVELOPMENT OUTCOME OF EXTREME PRETERM INFANTS AT 2 YEARS; HAS THE OUTCOME CHANGED OVER LAST FEW YEARS?

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Background and Aims Extremely low and very low gestational age (ELGA and VLGA) constitutes a risk factor for development even in absence of cerebral damage, as an immature central nervous system is exposed to invasive and inadequate stimulation. Different developmental trajectories emerged in relation to GA, with poorer developmental outcomes and higher rates of impairment in ELGAs and few mild impairments in VLGAs.

Method A retrospective Audit was done. All new-borns at Princess Royal University Hospital, Orpington, UK (< 30+0) between Jan 2008–Dec 2009 were included.

The **parameters** were as follows:

Gender
Gestation
Significant Neonatal intervention
Referred by hospital for dev asses or not
Assessed by community Paediatricians or not
Assessed at 2 years or not (H/C)
Referred to portage services or not if delay
Development delay if any
Outcome documented or not

Results Total no of cases:

2008: 26
2009: 23
Total: 49
47 eligible (as 2 had died)
10 (from out of borough or moved out so not followed up) so 37 eligible
29/37 (78%) followed up

Delay

Severe 6 (21%)
Mild 9 (31%)
No delay 14(48%)

These results are very similar to EPICure studies done in 2006.

Conclusions Children born prematurely still have a higher chance of physical impairment, 3–5 times higher rate of cognitive deficits at 6 years, 2–3 times higher risk of psychiatric diagnosis at 11–12 years. (EPICure).

To have the best possible outcome of these children one should follow them in a multidisciplinary team possibly in an integrated care pathway.

1250 DELUSIONAL IDEATION IN YOUNG ADULthood IS ASSOCIATED WITH GREY AND WHITE MATTER ALTERATIONS IN ADOLESCENCE

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Background and Aims Several studies have described an association between very preterm birth and psychiatric problems later in life. We aimed to investigate whether young adults who were born very preterm (VPT) (< 33 gestational weeks) are at increased risk of experiencing non-clinical psychotic symptoms compared to controls (e.g., delusional ideation) and whether such symptoms are associated with altered brain maturation.

Methods Sixty-four VPT born individuals and 39 controls (mean age 20 years) completed the Peters' Delusional Inventory, which measures psychosis proneness in the general population. Structural MRI data collected at age 15 years were used to investigate possible anatomical correlates of psychosis proneness, by subdividing the sample according to high (≥ 8 ; VPT: 40.6%, controls: 48.7%) and low (< 8) PDI scores.

Results The groups did not differ in PDI scores ($\chi^2=0.67$, $p=0.41$). High PDI scores at 20 years were associated with structural brain alterations at 15 years. In controls, those with high PDI scores showed decreased grey matter volume in parahippocampal and middle occipital gyri and decreased white matter volume in inferior temporal gyrus and precuneus. In VPT-born individuals grey matter volume decreases were observed in those with high PDI scores in superior/medial frontal and middle temporal gyri and white matter volume decreases in insula.

Conclusions High PDI scores in early adulthood are associated with region-specific structural brain alterations in mid-adolescence. Fronto-temporal alterations observed in the VPT group may reflect the neurodevelopmental vulnerability of this network, which has been implicated in the pathophysiology of delusions in psychosis.

1251 NEURODEVELOPMENTAL DISABILITIES AND MENTAL HEALTH IN EXTREME PRETERM CHILDREN. A NATIONAL POPULATION BASED STUDY

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Objective To compare mental health at 5 years in children born extremely preterm with a reference group, and assess associations between neurodevelopmental disabilities and mental health within the preterm group.

Design In a national Norwegian cohort with gestational age (GA) 22–27 weeks or birthweight 500–999g mental health was assessed with The Strengths and Difficulties Questionnaire (SDQ), cognitive function with the Wechsler Preschool and Primary Scale of Intelligence-Revised (WPPSI-R), motor function with the Movement Assessment Battery for children (ABC-test) and severity of cerebral palsy (CP) with the Gross Motor Function Classification for CP (GMFCS). Neurodevelopmental disabilities (NDD) were described as mild and moderate/severe. SDQ of the preterm children was compared with that of an unselected reference group. SDQ sub-scores $\geq 90^{\text{th}}$ percentile of the reference group were defined as a mental health problem and a Total Difficulties Score $\geq 90^{\text{th}}$ percentile (TDS90) as suggestive of psychiatric disorder.

Results Of 372 eligible preterm children parents completed SDQ for 255 (69 %). 97(38%) had TDS90 compared to 116 (11%) of the