OP02.38: Table

Dysplasia	*Bone length 20 weeks*	*Bone Length > 30 weeks*	*Spine*	*Face*	*Fingers*	*Other*
Achondroplasia	n	<< 3rd	n	FB	Short	macrocephaly
Acromesomelic	n	< 3rd	n	mild FB	Short	skull shape, narrow chest, bowed humerus
Kneist	n or 5th	≤ 5th	n	flat, mild micrognathia	N	short chest, talipes, bowed long bones
SEDC	< 5th	<< 3rd		micrognathia	N	short chest
Stickler	5th	5th	n	flat	N	
OI IV	n	n	n	n	N	mild femoral bowing
Brachytelephalangelic CDP	5th	< 5th	stippled	DNB	Camptodactly, stippled carpals	stippled epiphyses
Conradi Hunerman	< 5th	< 5th	stippled	DNB	N	stippled epiphyses

n – normal; FB – frontal bossing; DNB – depressed nasal bridge

With advances in molecular genetics and the understanding of the underlying metabolic pathologies, narrowing the differential diagnosis prenatal ultrasound may help target further investigations, facilitate definite antenatal diagnosis and improve parental counselling. Further collection of data on a multicentre basis will add to this body of knowledge and improve prenatal sonographic diagnosis of these rare dysplasias. Please contact l.chitty@ich.ucl.ac.uk to contribute cases.

OP02.39
Outcome of fetuses with prenatal diagnosis of finger and toe anomalies

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Objective: To evaluate the outcome of fetuses with prenatal diagnosis of finger and toe anomalies.
Methods: A retrospective observational study of all cases of polydactyly, oligodactyly and syndactyly of hands and feet diagnosed at our center in the period 2000–2005.
Results: Twenty-five cases of finger and toe anomalies were seen, including 14 cases of polydactyly, 3 cases of oligodactyly and 8 cases of syndactyly. Prenatal diagnosis was confirmed in all cases by postnatal follow-up. Among 14 cases of polydactyly diagnosed *in utero*, 8 were isolated, 5 of which with a family history of polydactyly (36%), whereas other anomalies were present in 6 fetuses (43%), mostly kidney disease (33%). Trisomy 13 was diagnosed in 2 fetuses with polydactyly associated with other anomalies (33%), whereas chromosomal abnormalities were not found in any case of isolated polydactyly. Among 3 cases of oligodactyly suspected prenatally, 2 were isolated and 1 was associated with transverse limb defect. In all cases the karyotype was normal. Syndactyly was isolated in 6 out of 8 cases (75%) identified. Among the remaining two fetuses one presented multiple anomalies and the other had a wide gap in the metopic suture. A chromosomal defect was found in one case and a Timothy syndrome in another. Six of out of 8 patients with a prenatal diagnosis of syndactyly terminated their pregnancies (75%).
Conclusions: When isolated the prognosis of polydactyly is generally good, however other malformations are present in about 40% of cases and chromosomal defects in one third of these. Oligodactyly is usually not associated with chromosomal abnormalities but other limb defects can be present. Albeit limited, our results confirm an association of syndactyly with genetic syndromes and chromosomal abnormalities in 50% of cases diagnosed *in utero*.

OP02.40
Congenital isolated talipes equinovarus; comparison of outcome between prenatal detection and detection only at birth

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Objective: To establish the impact on outcome of prenatally versus postnatally detected isolated talipes equinovarus (TEV).
Methods: The prenatal group was represented by 18 singleton pregnancies with a sonographically detected TEV (mean detection at 23 weeks) during the period 2000–2005. The postnatal group consisted of 64 infants with TEV. Both groups underwent redressement therapy followed by either surgical postlateral or, the more complex, postmedial release. Whereas for the prenatal group all treatment took place in the University pediatric orthopedic department, the postnatal group underwent redressement treatment either in the University Department (subset A) or in a regional general hospital (subset B). Statistical analysis included the Pearson Chi-square test or Fisher's exact test to analyse categorical variables and the unpaired t-test or the Mann-Whitney test to analyse continuous variables.
Results: The posterolateral vs posteromedial release was performed in the prenatal group and the postnatal subsets A and B in 10 vs 7, 20 vs 19 and 1 vs 24 infants at a mean age of 6.3, 6.7 and 8.6 months, with a mean duration of admission of 2.4, 2.8 and 5 days, respectively. A statistically significant difference existed for the surgical procedure ($p < 0.001$), age at surgery ($p < 0.01$) and admission time ($p < 0.001$) between the prenatal and postnatal subset B and the postnatal subset A and B.
Conclusion: Prenatal detection of TEV followed by treatment in a pediatric orthopedic department results in earlier and less complicated surgery and shorter admission period when compared with postnatally detected TEV where redressement treatment is commenced elsewhere.

OP03: FETAL CENTRAL NERVOUS SYSTEM

OP03.01
Intrauterine sonographic measurement of embryonic brain mantle

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Our purpose was to evaluate embryonic brain mantle measurements using intrauterine sonography with a 20 MHz flexible catheter based high-resolution real-time miniature transducer in early first-trimester pregnancy. Eighty five women about to undergo therapeutic abortion from 7 to 12 weeks' gestational age were