O-205 PARENTAL CARDIOVASCULAR MORBIDITY IN FAMILIES WITH A PRETERM CHILD, A NATIONAL REGISTER STUDY

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10.1136/archdischild-2014-307384.275

Background Prematurity is associated with a higher incidence of hypertension and glucose metabolism during childhood and young adulthood. This may be due to circumstances during fetal and early postnatal life or to confounders such as unhealthy lifestyle in childhood home. The confounder explanation would gain support if preterm birth would predict father's cardiovascular disease (CVD).

Objective We hypothesised that preterm birth would predict cardiovascular disease in both parents.

Design/methods Pregnancy data came from Finnish Medical Birth Register. During Jan 1, 1987 and Sep 30, 1990, we included the first singleton birth for each of the 196,427 mothers. National Population Register Centre tracked the fathers, 3,048 remained missing (and 27 mothers).

We obtained Hospital Discharge Register data from Aug, 1969, and non-primary care out-patient visit data from Sep 1986, both until 31 Dec 2012. The first occasion of CVD was when the ICD-9 and ICD-10 indicated coronary heart disease (CHD) or stroke.

We utilised Cox regression for proportional hazards to analyse the effect of GA group on CVD in mothers and fathers separately.

Results In mothers, preterm birth predicted CVD with Hazard Ratios (HRs) increasing up to 2.12 with shorter gestation (**Table 1**). Among thefathers, those whose baby had been born preterm were clearly not at ahigher risk for a CVD diagnosis (**Table 2**).

Abstract O-205 Table 1 Mohter's CVD diagnosis by index child's gestational age group

Mother's CVD diagnosis by index child's gestational age group					
Group*	HR	95% CI for HR		n	CVD
<28	2.00	1.36	2.94	417	26
28 to 31	2.12	1.61	2.79	809	52
32 to 33	1.61	1.22	2.13	954	50
34 to 36	1.55	1.38	1.74	6540	303
37 to 38	1.26	1.18	1.34	32996	1272
39 to 41	1.00			143499	4127
>41	0.95	0.83	1.09	8587	213
Missing	0.98	0.78	1.23	2598	74
Total				196400	6117

*full weeks of gestational age

Conclusions Since preterm birth predicted CVD only in mothers and not fathers, the higher CVD risk factors in those born preterm are unlikely to be mediated by unhealthy habits learnt from the parents.

Abstract O-205 Table 2 Father's CVD diagnosis by index child's gestational age group

Father's CVD diagnosis by index child's gestational age group					
Group*	HR	95% CI for HR		n	CVD
<28	0.71	0.49	1.03	347	28
28 to 31	0.94	0.75	1.19	759	72
32 to 33	0.67	0.53	0.84	917	73
34 to 36	0.97	0.89	1.05	6353	599
37 to 38	0.91	0.88	0.95	32490	2936
39 to 41	1.00			141690	12094
>41	1.18	1.09	1.27	8440	683
Missing	0.94	0.82	1.07	2383	215
Total				193379	16700

*full weeks of gestational age

O-206 POORER COGNITIVE AND GROSS MOTOR OUTCOME AT AGE 2.5 YEARS AFTER INTRAUTERINE EXPOSURE TO SSRI. PROCEEDINGS FROM THE DUTCH SMOK TRIAL

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10.1136/archdischild-2014-307384.276

Background Prescription rates of antidepressant medication during pregnancy range from 2.0% in the Netherlands to 13.4% in the USA. Concern has risen about the long-term effects of prenatal exposure to selective serotonin reuptake inhibitors (SSRIs) on the developing child.

Aim Determine the effect of prenatal exposure to SSRIs on neurodevelopment at 2.5 years.

Methods During pregnancy, 107 mother-infant pairs were included, of whom 63 were SSRI-exposed (SSRI-group) and 44 non-exposed (non SSRI). In both groups maternal depression and anxiety were measured using questionnaires (Beck Depression Inventory (BDI) and Spielberger's State Trait Anxiety Inventory (STAI), respectively).

At age 2.5 years 102 infants were tested using the Bailey Scales of Infant Development 3th edition (cognitive, fine motor and gross motor scales). Scaled scores (SS) were used for statistical analysis.

Abstract O-206 Table 1

	SSRI group	Non SSRI group	Adjusted STAI	Adjusted BDI
	SS mean ±SD	SS mean ± SD	p	p
Cognition	9.0 ± 1.4	9.9 ± 1.7	0.001	0.004
Fine motor	10.2 ± 2.4	10.6 ± 2.2	NS	NS
Gross motor	7.9 ± 2.2	9.1 ± 2.5	0.036	0.003

Results

Conclusions SSRI-exposed children perform significantly worse on the cognitive and gross motor scale of the BSID-III, independent of maternal depression, anxiety, education, smoking and alcohol use during pregnancy.