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SAT0127 LONG-TERM OUTCOME OF CHILDREN BORN TO MOTHERS WITH CHRONIC ARTHRITIS AND EXPOSED TO TNF-INHIBITORS DURING PREGNANCY: A CASE-CONTROL STUDY

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Background: Treatment with tumor necrosis factors inhibitors (TNFi) during pregnancy may be required in order to control maternal disease which itself can be a threat for maternal-fetal well-being and pregnancy outcome. Information about the follow-up of in utero exposed offspring is limited

Objectives: The aim of this study was to compare the health and developmental conditions of children born to mothers with chronic arthritis who

were exposed *in utero* to TNFi with those of unexposed children born to patients with the same age at conception and disease.

Methods: An *ad-hoc* created questionnaire was used to collect data on birth and growth parameters, breastfeeding, weaning, developmental milestones, vaccinations and illnesses.

Results: 122 live births in 97 women with chronic arthritis (65 RA and 32 SpA) were observed: 59 pregnancies were exposed to TNFi at the time of conception and 63 pregnancies were TNFi-naïve. In 57/59 (97%) pregnancies, TNFi was discontinued at positive pregnancy index. In 2/59 (3%) pregnancies TNFi was maintained throughout pregnancy due to active disease at conception. TNFi was restarted in 16/57 pregnancies (28%) (10 ETA, 5 CTZ, 1 ADA) during the 2nd-3rd trimester due to moderate-severe flare (median exposure 22 weeks; discontinuation of TNFi between 32-39 gestational weeks). In second group, TNFi (1 ETA, 1 CTZ) was introduced in 2/63 (3%) pregnancies during the 2nd trimester due to a severe flare. 16 in 16/63 (25%) pregnancies were managed with an increase of prednisone (max 10mg/day). To investigate the long-term follow-up of children exposed in utero to TNFi, 61 children exposed to TNFi at conception or during 2nd-3rd trimester (median age 29 months) and 61 unexposed children (median age 49 months) were compared. No significant differences in growth parameters and developmental milestones were observed. No excess nor particular pattern of congenital defects/malformations were observed. In both groups, vaccinations were performed according to the national schedule (no live vaccines in the first year of life) without relevant complications (Figure 1).

Conclusion: TNFi may be required in patients that experienced flare during pregnancy and they are effective in controlling maternal disease and ensures a good pregnancy outcome without complications for the health and growth of exposed children.

Table 1. Long-term follow up of children

	Pregnancies exposed to TNFi (n=61)		P value	Pregnancies unexposed to TNFi (n=61)	P value
	TNFi until positive pregnancy index (n=41)	TNFi during the 2 nd -3 rd trimester (n=20)			
Age at interview, mths.	32(10-86)	29(7-153)		49(7-169)	
Children growth					
Weight					
-at 0 mths, g	7250(7000-7600)	7550(6959-8178)	0.95	8000(7250-8245)	0.61
-at 12 mths, g	9350(8950-9850)	9975(9360-10838)	0.09	9600(8948-10673)	0.61
-at 24 mths, g	13050(11760-13625)	11250(10776-12825)	0.16	12680(11275-13510)	0.98
Length					
-at 0 mths, cm	67(65-68)	66(65-68)	0.95	68(65-70)	0.06
-at 12 mths, cm	75(74-77)	77(74-79)	0.29	76(73-78)	0.18
-at 24 mths, cm				90(85-92)	0.15
Head circumference					
-at 0 mths, cm	43(42-44)	44(42-44)	0.61	43(42-44)	0.45
-at 12 mths, cm	46(45-47)	47(45-49)	0.31	46(45-47)	0.96
Age at seated position, mths.	6(6-7)	6(6-7)	0.41	6(6-7)	0.38
Age at walking, mths	12(11-13)	13(11-15)	0.17	13(11-14)	0.32
Age at speaking, mths	20(15-24)	19(12-24)	0.77	24(14-24)	0.52
Reactions to vaccinations (performed according to the vaccination schedule for childhood)	1 rash post measles vaccines	1 post MPR (measles, mumps, and rubella) fever, rash and conjunctivitis		1 allergic reaction to PCV (Pneumococcal Conjugate Vaccine)	
Pathological conditions during the first year of life	1 hand foot and mouth disease 1 cardiac murmur 1 cryptorchidism surgery 1 anal fissure	1 total ductocle 1 atopic dermatitis 1 meningitis 1 pyelonephritis		1 hydrocephalus and testicular hydrocele 1 atopic dermatitis 1 inguinal hernia 1 lactose intolerance	
Pathological conditions after the first year of life	1 autism spectrum disorder	1 amblyopia		1 language disorder 1 recurrent otitis	

All data are expressed as median (IQR)

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SAT0128

A PHASE 4 TRIAL ASSESSING THE IMPACT OF RESIDUAL INFLAMMATION AND CLINICAL CHARACTERISTICS ON THE OUTCOME OF DOSE TAPERING OF ADALIMUMAB IN PATIENTS WITH RHEUMATOID ARTHRITIS WHO ARE IN STABLE CLINICAL REMISSION

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Background: For rheumatoid arthritis (RA) pts in stable clinical remission (SCR) on bDMARDs, EULAR and ACR recommend to consider tapering