

Reproductive Health Outcomes in Women with RA and PsA

K Murray¹, L Moore¹, P Gallagher¹, Y Alammari¹, C O'Brien², C Brophy², F McAuliffe², DJ Veale¹

1) Centre for Arthritis and Rheumatic Disease, Dublin 4, Ireland, 2). National Maternity Hospital, Dublin 2, Ireland



BACKGROUND

- RA improves in pregnancy and flares postpartum
- Active disease causes adverse foetal outcomes
- In PsA, the data is less clear as many of these studies are retrospective, lack validated disease activity scores and predate biologic use
- We sought to compare disease activity plus maternal and foetal outcomes between RA and PsA.

RESULTS

- 23 RA and 11 PsA patients were included
- Median (range) age was 36 (27-43) in RA and 36 (27-39) in PsA
- TNFi usage was higher in PsA than RA [8 (73%) versus 4 (17%), p=0.001, Mann Whitney U]. 7 (30%) RA and 2 (18%) PsA patients took a csDMARD. 5 (22%) RA and 1 (9%) PsA patients took prednisolone. 3 (13%) RA and 2 (18%) PsA patients were prescribed a non-TNFi biologic. One patient was prescribed an NSAID in each group. Aspirin was taken by 6 (26%) RA and 2 (18%) PsA patients
- Overall, disease activity scores decreased during pregnancy and increased postpartum (Table 1). Maternal and foetal outcomes are shown in Table 2.

Table 1. Disease activity

	Pregnancy planning		Pregnant		Postpartum	
	RA	PsA	RA	PsA	RA	PsA
VAS, mm	40 (20-50)	35 (20-50)	30 (0-90)	30 (0-100)	30 (20-70)	50 (0-100)
28 TJC	0 (0-12)	6.5 (1-12)	0 (0-10)	0 (0-2)	2 (0-8)	1 (0-2)
28 SJC	0 (0-12)	1.5 (1-12)	0 (0-10)	0 (0-2)	1 (0-8)	1 (0-2)
CRP	7.75 (3-13)	1.85 (2-2)	4.35 (1-14)	4.75 (3-14)	14 (3-299)	1.5 (1-2)
DAS28CRP-3	3.52 (1.65-5.40)	3.31 (2.48-4.14)	1.89 (1.31-5.13)	1.86 (1.65-3.17)	3.21 (1.69-5.01)	2.16 (1.59-2.73)

Data presented as median (range)

CONCLUSIONS

- In this small study, disease activity generally improved in pregnancy and flared postpartum.
- There were adverse maternal outcomes in 33% of RA and 20% of PsA patients.
- Adverse foetal outcomes were seen in the offspring of 1/15 of RA and 1/5 of PsA patients
- Compared to the Irish population, birthweights were similar, maternal age was older and rates of Caesarean section were higher

METHODS

- Prospective study of women attending our multidisciplinary combined service
- Patients reviewed pre-pregnancy, once per trimester and at 3 months postpartum
- DAS28CRP-3 was used to assess disease activity as this is validated in pregnancy
- Between group differences analysed using Pearson Chi square, Fischer's exact test or Mann-Whitney U tests

Table 2. Maternal and foetal outcomes

	RA (n=15)	PsA (n=5)
Method of delivery		
Spontaneous vaginal delivery	6 (40%)	4 (80%)
Assisted vaginal delivery	3 (20%)	0
Emergency Caesarean section	4 (27%)	1 (20%)
Elective Caesarean section	2 (13%)	0
Birth outcome		
Female child	8 (57%)	4 (80%)
Birthweight, kg¹	3.49 (2.94-3.91)	3.18 (1.02-4.02)
Gestational age, weeks	40.5 (37.4-41.6)	39.0 (25.6-40.4)
Preterm birth	0	1 (20%)
5 Minute APGAR score	9 (9-9)	8.5 (7-9)
Maternal adverse outcome	5 (33%)	1 (20%)
Caesarean wound infection	2 (14%)	1 (20%)
3rd or 4th degree tear²	3 (21%)	0
Foetal adverse outcomes		
Neonatal ICU admission	0	1 (20%)
Foetal ventilator requirement	0	1 (20%)
Foetal jaundice	1 (7%)	1 (20%)
Foetal anaemia	0	1 (20%)
Foetal hypoglycaemia	1 (7%)	0

1). Nationally=3.49kg 2). General population rate 3%