10.1071/RD22240

Reproduction, Fertility and Development

Supplementary Material

Sulfasalazine exposure during pregnancy and lactation: reproductive outcomes in male rat offspring

Simone Forcato[A], *Ana Beatriz de Oliveira Aquino*[A], *Lorena I. Borges*[A], *Maria Luiza Francisconi Lubanco Thomé*[A], *Júlia O. Bilibio*[A], *Hannah Hamada Mendonça Lens*[B], *Rafaela P. Erthal*[C], *Flávia A. Guarnier*[B], *Glaura Scantamburlo Alves Fernandes*[C], *and Daniela Cristina Ceccatto Gerardin*[A,*]

[A]Department of Physiological Sciences, Londrina State University, Londrina, PR, Brazil.

[B]Department of General Pathology, Londrina State University, Londrina, PR, Brazil.

[C]Department of General Biology, Londrina State University, Londrina, PR, Brazil.

[*]Correspondence to: Daniela Cristina Ceccatto Gerardin Department of Physiological Sciences, State University of Londrina- UEL, Londrina 86051-980, PR, Brazil Email: dcgerardin@uel.br

Supplementary Data:

Table S1. Body weight, weight of right testis and epididymis from male rats at PND 21.

Parameters	CTR [10]	SASG [9]
Body weight (g)	40.76 (38.35-44.81)	40.27 (38.53-43.32)
Right testis (g)	0.083 ± 0.20	0.080 ± 0.16
Right epididymis (g)	0.015 ± 0.003	0.015 ± 0.002

Data are given as the mean ± standard deviation or as median (1st and 3rd quartile) with the significance of differences analyzed using the Student's t-test or *Mann–Whitney* test as appropriate, $p>0.05$. Numbers in square brackets represent the number of animals per group. Male rats born from females treated with 300mg/kg/day of sulfasalazine during gestation and lactation periods. PND: postnatal day; CTR: control group; SASG: sulfasalazine group.

Table S2. Stereological analysis of epididymis of male rats exposed maternally to SAS at puberty (PND 45-60), and adult life (PND 120-125)

	Ages / Experimental group			
	Puberty (PND 45-60)		Adult (PND 120-125)	
Parameters	CTR [7]	SASG [7]	CTR [7]	SASG [7]
Epididymal caput (2A region)				
Epithelial	33.72 ± 5.57	37.33 ± 5.94	25.90 ± 4.46	24.83 ± 2.32
Lumen	38.79 ± 12.40	38.56 ± 5.75	51.01 ± 7.22	50.21 ± 6.86
Stroma	27.48 ± 7.46	26.11 ± 9.39	23.07 ± 6.99	25.41 ± 6.40
Epididymal cauda (5A/B region)				
Epithelial	29.67 ± 2.41	34.37 ± 4.05	25.41 ± 2.92	24.65 ± 1.93
Lumen	50.29 ± 4.04	46.79 ± 8.67	49.43 ± 6.77	49.18 ± 5.84
Stroma	20.01 ± 4.61	18.82 ± 7.52	25.16 ± 8.82	26.24 ± 5.41

Data are given as the mean ± standard deviation with the significance of differences analyzed using the Student's t-test, $p>0.05$. Numbers in square brackets represent the number of animals per group. Male rats born from females treated with 300mg/kg/day of sulfasalazine during gestation and lactation periods. CTR: control group; SASG: sulfasalazine group.

Table S3. Number of spermatids and daily sperm production per testis, sperm number and transit time in the epididymis, and sperm count in the vas deferens of adult male rats at PND 90-95.

Parameters	**CTR [7]**	**SASG [8]**
Nº of spermatids (10^6/testis)	143.20 ± 42.96	150.68 ± 24.75
Nº of spermatids (10^6/g/testis)	105.86 ± 26.90	109.90 ± 14.14
Daily Sperm Production (million)	23.48 ± 7.04	24.70 ± 4.06
Nº of spermatozoa x 10^6/caput + corpus of epididymis	119.94 ± 20.70	119.19 ± 22.42
Nº of spermatozoa x10^6/g/caput + corpus of epididymis	444.95 ± 50.67	389.74 ± 77.35
Nº of spermatozoa x 10^6/cauda of epididymis	179.01 (171.52-188.02)	169.16 (128.06-229.75)
Nº of spermatozoa x 10^6/g/cauda of epididymis	937.61 ± 207.59	792.10 ± 231.11
Sperm transit time (days) through caput/corpus of epididymis	4.58 (4.40-5.99)	4.54 (4.39-5.61)
Sperm transit time through cauda of epididymis (days)	7.53 (6.27-11.59)	6.70 (5.02-8.75)
Sperm count in vas deferens (10^6/ml)	26.90 ± 6.56 [10]	26.05 ± 6.41 [10]

Data are given as the mean ± standard deviation or as median (1st and 3rd quartile) with the significance of differences analyzed using the Student's t-test or *Mann–Whitney* test as appropriate, $p>0.05$. Numbers in square brackets represent the number of animals per group. Male rats born from females treated with 300mg/kg/day of sulfasalazine during gestation and lactation periods. CTR: control group; SASG: sulfasalazine group.