

“Feed-and-wrap” technique versus deep sedation for neonatal magnetic resonance imaging: a retrospective comparative study

ELECTRONIC SUPPLEMENTARY MATERIAL

Supplementary Table 1 – Differences in total examination length, analysis of different subgroups based on the use of contrast agent and body region.

Length of the examination (min)	Sedation	„Feed-and-Wrap“	Total	p- value
All patients	39 ± 14 (n = 243)	32 ± 12 (n = 189)	36 ± 14 (n = 432)	< 0.001
Without contrast agent	36 ± 13 (n = 169)	31 ± 11 (n = 177)	34 ± 13 (n = 346)	< 0.001
With contrast agent	44 ± 15 (n = 74)	42 ± 17 (n = 12)	44 ± 15 (n = 86)	0.995
Head	38 ± 10 (n = 138)	32 ± 9 (n = 122)	35 ± 10 (n = 260)	< 0.001
Neck/Thorax	37 ± 7 (n = 5)	33 ± 21 (n = 6)	34 ± 15 (n = 11)	0.429
Abdomen	31 ± 12 (n = 30)	22 ± 9 (n = 28)	26 ± 11 (n = 58)	0.001
Musculoskeletal	28 ± 12 (n = 19)	30 ± 16 (n = 8)	28 ± 13 (n = 27)	0.897
Whole-body/multiple regions	50 ± 19 (n = 51)	40 ± 15 (n = 25)	47 ± 18 (n = 76)	0.043

All values are presented as mean ± standard deviation, and total numbers of patients in the respective subgroup (in brackets). Significant differences are marked in bold.

Supplementary Table 2 – Estimated incidence rate ratios derived from negative binomial model, subgroup analysis based on corrected age.

Predictor	Incidence rate ratio (95%-confidence interval)	p- value
Technique FWT versus sedation	3.39 (1.47 – 7.83)	< 0.001
Corrected age [days]	1.014 (1.005 – 1.024)	0.004
Gender male versus female	0.96 (0.72 – 1.3)	0.964
Body weight [kg]	0.7 (0.54 – 0.9)	0.006
Body region neck/thorax versus head abdomen versus head musculoskeletal versus head whole-body/multiple regions versus head	0.52 (0.22 – 1.25) 0.56 (0.35 – 0.89) 0.86 (0.43 – 1.74) 0.44 (0.29 – 0.69)	0.521 0.015 0.682 < 0.001
Field strength 3T versus 1.5T	1.12 (0.83 – 1.51)	0.442

a) Results of subgroup 1 (corrected age of 50 days or lower, n = 292)

Predictor	Incidence rate ratio (95%-confidence interval)	p- value
Technique FWT versus sedation	162 (63 – 420)	< 0.001
Corrected age [days]	1.072 (1.042 – 1.1)	< 0.001
Gender male versus female	1.57 (0.58 – 4.22)	0.342
Body weight [kg]	0.57 (0.36 – 0.9)	0.016
Body region neck/thorax versus head abdomen versus head musculoskeletal versus head whole-body/multiple regions versus head	n/a (low sample size) 0.04 (0.01 – 0.19) n/a (low sample size) 0.04 (0.01 – 0.15)	< 0.001 < 0.001
Field strength 3T versus 1.5T	0.27 (0.11 – 0.68)	0.005

b) Results of subgroup 2 (corrected age > 50 days, n = 126, 14 cases – neck/thorax and musculoskeletal – excluded due to low sample size for body region)