

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Splanchnic and Cerebral Oxygen Kinetics in Association With Feeding and Transfusion (N=24)

Transfusion epochs	Feeding phases	SpO ₂ Mean (SD), %	Splanchnic StO ₂ , Mean (SD), %	Cerebral StO ₂ , Mean (SD), %
0	0	96.7 (2.8)	84.8 (6.7)	71.1 (5.6)
	1	96.2 (2.6)	84.6 (6.9)	70.3 (6.0)
	2	96.7 (2.1)	83.8 (6.8)	71.0 (6.2)
	3	96.4 (2.8)	83.7 (6.8)	71.8 (6.0)
	4	97.2 (1.9)	83.7 (7.1)	72.1 (5.3)
1	0	96.1 (1.9)	85.7 (6.1)	76.3 (3.9)
	1	94.9 (3.4)	83.4 (5.7)	74.8 (4.8)
	2	96.0 (1.8)	83.8 (5.6)	75.9 (4.2)
	3	96.3 (1.8)	83.7 (5.3)	76.6 (3.7)
	4	96.4 (1.8)	83.4 (5.4)	76.9 (3.7)
2	0	96.0 (2.2)	85.1 (5.8)	75.2 (6.7)
	1	95.3 (3.1)	83.6 (4.8)	75.0 (5.7)
	2	96.4 (2.2)	84.1 (5.1)	75.3 (4.8)
	3	96.3 (2.4)	84.9 (5.8)	75.9 (5.2)
	4	95.8 (2.5)	84.4 (5.9)	75.6 (5.1)
3	0	96.1 (2.3)	84.0 (7.5)	74.2 (6.2)
	1	95.8 (2.8)	83.5 (6.8)	73.4 (6.2)
	2	96.1 (2.5)	83.8 (7.8)	74.1 (6.0)
	3	96.2 (2.3)	84.3 (8.3)	74.6 (6.4)
	4	95.7 (2.8)	83.4 (7.5)	74.3 (6.8)

SpO₂= pulse oximeter oxygen saturation; StO₂ = tissue oxygen saturation;

eTable 2. Splanchnic and cerebral FTOE estimates from exploratory analysis

TE	FP	Splanchnic FTOE		Cerebral FTOE	
		[N] Mean (SD), %	95% CI, %	[N] Mean (SD), %	(95% CI), %
0	0	[24] 12.06 (7.37)	8.95 - 15.18	[24] 26.23 (5.43)	23.94 - 28.52
	1	[24] 11.68 (7.54)	8.49 - 14.86	[24] 26.67 (5.57)	24.32 - 29.03
	2	[24] 13.01 (6.91)	10.10 - 15.93	[24] 26.41 (5.62)	24.04 - 28.79
	3	[24] 12.92 (6.70)	10.09 - 15.75	[24] 25.40 (5.84)	22.94 - 27.87
	4	[24] 13.59 (7.12)	10.59 - 16.60	[24] 25.58 (5.11)	23.42 - 27.74
1	0	[22] 10.55 (5.50)	8.11 - 12.99	[22] 20.45 (3.04)	19.11 - 21.80
	1	[22] 11.73 (5.18)	9.43 - 14.02	[22] 20.97 (4.14)	19.14 - 22.81
	2	[22] 12.57 (5.70)	10.05 - 15.10	[22] 20.80 (3.74)	19.14 - 22.46
	3	[22] 12.80 (5.26)	10.47 - 15.13	[22] 20.27 (3.31)	18.80 - 21.74
	4	[22] 13.21 (5.96)	10.57 - 15.85	[22] 20.05 (3.50)	18.50 - 21.60
2	0	[23] 11.16 (5.46)	8.80 - 13.52	[23] 21.46 (6.49)	18.65 - 24.27
	1	[22] 12.17 (4.24)	10.29 - 14.04	[22] 21.49 (5.05)	19.26 - 23.73
	2	[22] 12.63 (4.54)	10.62 - 14.64	[22] 21.96 (4.50)	19.97 - 23.96
	3	[22] 11.87 (5.11)	9.61 - 14.14	[22] 21.41 (4.93)	19.23 - 23.59
	4	[22] 11.98 (4.94)	9.79 - 14.17	[22] 21.35 (4.63)	19.30 - 23.41
3	0	[21] 12.79 (7.06)	9.58 - 16.01	[21] 23.00 (5.78)	20.37 - 25.63
	1	[21] 12.55 (6.95)	9.38 - 15.72	[21] 23.46 (6.00)	20.73 - 26.19
	2	[21] 12.85 (7.89)	9.26 - 16.44	[21] 23.22 (5.92)	20.52 - 25.91
	3	[21] 12.53 (8.56)	8.63 - 16.43	[21] 22.69 (6.00)	19.96 - 25.42
	4	[21] 13.09 (7.19)	9.82 - 16.36	[21] 22.69 (5.69)	20.10 - 25.28

TE = Transfusion Epoch; FP = Feeding Phase; FTOE = Fractional tissue oxygen extraction; CI – Confidence Intervals

e Table 3: Splanchnic FTOE estimates from primary MMRM model (N=24)

	TE0	TE1	TE2	TE3
FP0	12.06 (9.54 to 14.59)	10.47 (7.89 to 13.05)	11.00 (8.45 to 13.56)	13.04 (10.43 to 15.65)
FP1	11.68 (9.15 to 14.21)	11.65 (9.07 to 14.24)	12.01 (9.43 to 14.59)	12.80 (10.19 to 15.41)
FP2	13.01 (10.48 to 15.54)	12.50 (9.92 to 15.08)	12.47 (9.89 to 15.05)	13.10 (10.49 to 15.71)
FP3	12.92 (10.40 to 15.45)	12.73 (10.15 to 15.31)	11.72 (9.13 to 14.30)	12.78 (10.17 to 15.39)
FP4	13.59 (11.06 to 16.12)	13.14 (10.56 to 15.72)	11.82 (9.24 to 14.40)	13.34 (10.73 to 15.95)

P = 0.97 for the FP-by-TE interaction term.

Values represent mean (95% CI), % for splanchnic FTOE

MMRM = Mixed model for repeated measures

TE = Transfusion Epoch; FP = Feeding Phase; FTOE = Fractional tissue oxygen extraction;

CI – Confidence Intervals

e Table 4: Cerebral FTOE estimates from primary MMRM model (N=24)

	TE0	TE1	TE2	TE3
FP0	26.23 (24.14 to 28.31)	20.48 (18.36 to 22.59)	21.71 (19.61 to 23.81)	22.91 (20.77 to 25.04)
FP1	26.67 (24.59 to 28.76)	21.00 (18.88 to 23.11)	21.37 (19.26 to 23.49)	23.37 (21.24 to 25.50)
FP2	26.41 (24.33 to 28.50)	20.82 (18.71 to 22.94)	21.84 (19.72 to 23.96)	23.12 (20.99 to 25.26)
FP3	25.40 (23.32 to 27.49)	20.29 (18.18 to 22.41)	21.29 (19.17 to 23.40)	22.60 (20.47 to 24.73)
FP4	25.58 (23.49 to 27.66)	20.07 (17.96 to 22.19)	21.23 (19.12 to 23.35)	22.60 (20.46 to 24.73)

P > 0.99 for the FP-by-TE interaction term.

Values represent mean (95% CI), % for cerebral FTOE

MMRM = Mixed model for repeated measures

TE = Transfusion Epoch; FP = Feeding Phase; FTOE = Fractional tissue oxygen extraction;

CI – Confidence Intervals