

Supplementary Table 1. Correlation of the covariates and vital signs (n=185)

	Sex	Age	BMI	Sleeping time ratio	DAS	Pederson scale
Vital sign outlier						
Heart rate	0.158 ¹	0.000 ^{2,*}	0.115 ²	0.132 ²	0.159 ²	0.227 ²
SBP	0.530 ³	0.754 ²	0.188 ²	0.981 ²	0.271 ²	0.500 ²
DBP	0.865 ¹	0.162 ²	0.807 ²	0.128 ²	0.161 ²	0.237 ²
Heart rate						
T0	0.191 ²	0.693 ⁴	0.911 ⁴	0.082 ⁴	0.000 ^{4,*}	0.832 ⁴
T1	0.034 ^{2,*}	0.154 ⁴	0.297 ⁴	0.167 ⁴	0.001 ^{4,*}	0.475 ⁴
T2	0.004 ^{2,*}	0.020 ^{4,*}	0.306 ⁴	0.528 ⁴	0.000 ^{4,*}	0.474 ⁴
T3	0.000 ^{2,*}	0.002 ^{4,*}	0.108 ⁴	0.886 ⁴	0.000 ^{4,*}	0.295 ⁴
T4	0.001 ^{2,*}	0.003 ^{4,*}	0.165 ⁴	0.508 ⁴	0.000 ^{4,*}	0.011 ^{4,*}
SBP						
T0	0.000 ^{2,*}	0.006 ^{4,*}	0.000 ^{4,*}	0.895 ⁴	0.806 ⁴	0.016 ^{4,*}
T1	0.000 ^{2,*}	0.025 ^{4,*}	0.000 ^{4,*}	0.590 ⁴	0.645 ⁴	0.009 ^{4,*}
T2	0.000 ^{2,*}	0.247 ⁴	0.000 ^{4,*}	0.837 ⁴	0.317 ⁴	0.019 ^{4,*}
T3	0.003 ^{2,*}	0.496 ⁴	0.000 ^{4,*}	0.241 ⁴	0.515 ⁴	0.481 ⁴
T4	0.000 ^{2,*}	0.775 ⁴	0.000 ^{4,*}	0.630 ⁴	0.211 ⁴	0.589 ⁴
DBP						
T0	0.001 ^{2,*}	0.000 ^{4,*}	0.000 ^{4,*}	0.474 ⁴	0.791 ⁴	0.004 ^{4,*}
T1	0.001 ^{2,*}	0.000 ^{4,*}	0.000 ^{4,*}	0.951 ⁴	0.742 ⁴	0.000 ^{4,*}
T2	0.068 ²	0.001 ^{4,*}	0.000 ^{4,*}	0.606 ⁴	0.843 ⁴	0.005 ^{4,*}
T3	0.026 ^{2,*}	0.010 ^{4,*}	0.000 ^{4,*}	0.616 ⁴	0.966 ⁴	0.144 ⁴

T4	0.001 ^{2,*}	0.001 ^{4,*}	0.000 ^{4,*}	0.353 ⁴	0.417 ⁴	0.013 ^{4,*}
----	----------------------	----------------------	----------------------	--------------------	--------------------	----------------------

(BMI: body mass index, DAS: dental anxiety score, SBP: systolic noninvasive blood pressure, DBP: diastolic noninvasive blood pressure, T0: the moment right before sedative administration, T1: 5 minutes after sedative administration, T2: the time of injection of the local anesthetic agent, T3: 20 minutes after local anesthesia, T4: the time of the start of the primary closure)

¹Pearson's chi-square test. ²Student's *t*-test. ³Fisher's exact test. ⁴Pearson's correlation analysis.

* $P < 0.05$.

Supplementary Table 2. Comparison of values according to each time interval in the midazolam group (n=75)

	T1	T2	T3	T4
Heart rate				
T0	0.039*	0.000*	0.000*	0.000*
T1		0.000*	0.000*	0.000*
T2			0.000*	0.000*
T3				0.495
SBP				
T0	0.657	0.005*	0.001*	0.001*
T1		0.004*	0.001*	0.011*
T2			0.813	0.809
T3				0.559
DBP				
T0	0.010*	0.016*	0.000*	0.165
T1		0.587	0.039*	0.619
T2			0.104	0.256
T3				0.001*
BIS				
T0	0.000*	0.000*	0.000*	0.000*
T1		0.026*	0.000*	0.000*
T2			0.006*	0.000*
T3				0.009*

(T0: the moment right before sedative administration, T1: 5 minutes after sedative administration, T2: the time of injection of the local anesthetic agent, T3: 20 minutes after local anesthesia, T4: the time of start of the primary closure, SBP: systolic noninvasive blood pressure, DBP: diastolic noninvasive blood pressure, BIS: bispectral index score)

P-values by paired *t*-test.

**P*<0.05.

Supplementary Table 3. Comparison of values according to each time interval in the dexmedetomidine group (n=75)

	T1	T2	T3	T4
Heart rate				
T0	0.000*	0.335	0.002*	0.499
T1		0.000*	0.000*	0.000*
T2			0.021*	0.606
T3				0.000*
SBP				
T0	0.858	0.679	0.035*	0.000*
T1		0.696	0.018*	0.000*
T2			0.027*	0.000*
T3				0.003*
DBP				
T0	0.080	0.000*	0.000*	0.000*
T1		0.000*	0.000*	0.000*
T2			0.000*	0.000*
T3				0.341
BIS				
T0	0.000*	0.000*	0.000*	0.000*
T1		0.000*	0.741	0.752
T2			0.000*	0.000*
T3				0.943

(T0: the moment right before sedative administration, T1: 5 minutes after sedative administration, T2: the time of injection of the local anesthetic agent, T3: 20 minutes after local anesthesia, T4: the time of start of the primary closure, SBP: systolic noninvasive blood pressure, DBP: diastolic noninvasive blood pressure, BIS: bispectral index score)

P-values by paired *t*-test.

**P*<0.05.