EFFECT OF CEREBRAL STATE INDEX MONITORING ON ANESTHETIC EFFECT DURING LAPAROSCOPIC CHOLECYSTECTOMY

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[ABSTRACT] Objective To investigate the effect of Cerebral State Index (CSI) monitoring on anesthetic effect during laparoscopic cholecystectomy (LC). Methods A total of 114 patients who underwent elective LC in our hospital from February 2016 to April 2017 were enrolled and divided into observation group with 55 patients and control group with 59 patients using a random number table. The patients in the observation group received anesthesia under CSI monitoring, with CSI maintained at 45±5, and those in the control group received conventional anesthesia. The two groups were observed in terms of heart rate (HR), mean arterial pressure (MAP), systolic blood pressure (SBP), diastolic blood pressure (DBP), at 10 minutes after induction (T1), immediately after tracheal intubation (T2), at the time of surgical biopsy (T3), at 3 minutes after pneumoperitoneum was established (T4), at the end of surgery (T5), and at the time of extraction of endotracheal tube (T6), as well as time of operation and the amount of anesthetic used. Results Compared with the control group, the observation group had a significantly lower HR at T2, T4, and T5 (P<0.05) and significantly lower MAP, SBP, and DBP at T2 and T4 (P<0.05). The observation group had a time to spontaneous breathing recovery of (5.16±1.44) min, an extubation time of (11.10±2.16) min, and a wake-up time of (7.44±2.41) min, which were significantly shorter than those in the control group (r=5.863-12, 546, P<0.05). The amount of propofol used in the observation group was (210.01±7.91) mg, and the observation group had a significantly lower amount than the control group (r=33, 507, P<0.05); there was no significant difference in the amount of remifentanil used between the observation group and the control group (P>0.05). There was no significant difference in the rate of successful awareness between the observation group and the control group (0 vs. 1.82%, P>0.05), Conclusion CSI monitoring during LC can keep patients’ vital signs stable, shorten the time to post-anesthesia recovery, and reduce the amount of anesthetic used; therefore, it holds promise for clinical application.

[KEY WORDS] cerebral state index; cholecystectomy, laparoscopic; propofol; remifentanil
L C (出血等中枢神经系统病变 国麻醉医师协会 生理功能变化 例 讨)
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与对照组比较 两组病人入院后立即完善相关检查

麻醉方法

表 17.21±1.24

脢 staged) 5 μg/

表 2.1 10 min(T0),

表 2.1 MAP, HR, SBP, DBP

① T0, T1, T2, T3, T4, T5

x²(0)。 P < 0.05 、

表 1 1 (x±s)

表 2 2 (x±s) HR, MAP, SBP, DBP

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表 1 1 (x±s)

表 2 2 (x±s) HR, MAP, SBP, DBP
观察组

对照组

神经与周围神经系统后产生干扰素

呼吸抑制甚至呼吸衰竭等严重术中并发症

系统

病人不会出现呼吸抑制等现象

晓情况比较差异无统计学意义

神经敏感症状

组别

两组术中知晓情况比较

表

两组各时间指标的比较

见表

t = 3.507, P < 0.05

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P < 0.05

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P > 0.05

t = 3.507, P < 0.05;

n = 59, 61.10 ± 11.75

64.55 ± 12.21

6.75 ± 1.44

7.44 ± 2.41

t = 3.507, P < 0.05

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t = 3.507, P < 0.05

t = 3.507, P < 0.05

T2 T4 T12

HR, MAP, SBP, DBP

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