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多模式术后镇痛在腹腔镜结肠手术中的应用

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摘要 目的:理论上联合使用不同机制镇痛药较镇痛药单独使用镇痛效果更完善,在妇科、骨科等手术中已有结论;笔者观察比较腹腔镜结肠手术使用单一止痛药及联合使用不同机制镇痛药在术后镇痛的效果以及各自不良反应的发生率。**方法:**择期腹腔镜结肠手术患者 90 例,随机分为 3 组,每组 30 例。A 组使用地佐辛+氟比洛芬酯行术后镇痛为多模式镇痛组;B 组使用地佐辛行术后镇痛;C 组使用氟比洛芬酯行术后镇痛。记录每组术后 4、8、12、24 h 视觉模糊评分(VAS)及术后不良反应包括嗜睡、躁动、恶心呕吐的发生率。**结果:**A 组术后 4 h、8 h 的 VAS 评分低于 B、C 两组,差异有显著性,A 组无嗜睡及躁动发生,发生呕吐 1 例,不良反应发生率 A 组低于 B、C 两组,差异有显著性。**结论:**地佐辛+氟比洛芬酯联合用药可安全有效应用于腹腔镜结肠手术术后镇痛,是一种有效的多模式术后镇痛方式,在减弱疼痛的放大效应及对中枢神经的作用两方面起效,因而较单独使用地佐辛及氟比洛芬酯有更好的镇痛效果,且不良反应低于单独使用地佐辛及氟比洛芬酯。

关键词:多模式;术后镇痛;腹腔镜;结肠手术

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Multi-model Postoperative Analgesia Use in Laparoscopic Colon Surgery

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ABSTRACT Objective: In theory combined different mechanism of analgesic drugs have perfect analgesic effect compared with single use of analgesic drug. The method is called multi-model postoperative analgesia and the conclusion has got that use in gynecological surgery, orthopedics surgery laparoscopic cholecystectomy the method had satisfied effect with less adverse effect. To investigate if multi-model postoperative analgesia can be used in laparoscopic colon surgery can have better effect compare with use single analgesia drug and observe the rate of adverse effect while use these drugs in different groups. The aim of multi-model postoperative analgesia is block the different stages of postoperative pain, as start stage, transfer and function of central nervous. Non-steroidal anti-inflammatory drugs are fundamental drug can effectively block the pain of amplification process, so it can reduce pain generation at source, and can reduce the dosage of opiates also; new type of opioid receptor agonist can significantly reduce the central nervous sensitivity to pain, that means make pain can't transfer to target organs; combine two kinds of analgesic drugs mentioned above is the clinical commonly used method can gain perfect analgesic effect. **Methods:** 90 patients undergoing elective surgery, were randomly divided into the three groups with 30 cases in each group. In group A use dezoxine combine flurbiprofen axetil, in group B use dezoxine for postoperative analgesia drug while use flurbiprofen axetil for postoperative analgesia drug in C group. Record VAS score of postoperative for 4, 8, 12, 24 h in the three groups and the rate of adverse effect in the three groups. **Results:** 8 hour after surgery VAS score in group A was 3.5 ± 0.4 , group A VAS score below than B, C group, with significant difference, adverse reactions in group A less than B, C group, significant difference. **Conclusion:** Dezocine combine with flurbiprofen axetil use in laparoscopic rectal surgery for postoperative analgesia can both Block the pain of amplification process and block the pain of affect on target organ, compare to single use dezocine or flurbiprofen axetil this kind of combine drugs use for multi-model postoperative analgesia is safe and effective with less adverse reactions.

Key words: Multi-model; Postoperative analgesia; Laparoscopic; Colon surgery

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前言

外科手术微创化趋势日渐显著,腹腔镜结肠手术临床应用日渐广泛,我们医院目前此类手术已全部微创化。但由于微创在一定程度其术后镇痛易被忽视,疼痛不仅给患者带来痛苦,

还会导致内分泌改变,延长恢复时间及住院时间。阿片类药物长期作为镇痛的一线药物,镇痛作用强大、确切,但常带来嗜睡、呕吐、皮肤瘙痒等副反应,尤其抑制肠蠕动使其在此类手术镇痛方面应用受限,良好的替代方案是临床研究的方向。目前多模式镇痛为临床研究的热点,联合不同的镇痛方法及不同的镇痛药物以达到更好的镇痛效果,而副作用降低的目的。联合不同方法常使用静脉镇痛联合神经阻滞,联合不同药物采用阿片类联合环氧化酶抑制剂。联合不同药物在临床更为普遍,包

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括联合环氧化酶抑制剂氟比洛酚酯及阿片类相关的多模式手术镇痛目前已在骨科、妇产科、普外科胆囊手术中应用并取得很好效果且并发症较少,已证实其安全有效性。但在此类手术文献较少,联合使用地佐辛及氟比洛酚酯目前未见报道,笔者就此进行研究,以供临床借鉴,现报道如下。

1 资料和方法

1.1 一般资料

择期结肠手术患者 90 例,年龄 55-72 岁,体重 50-72 kg, ASA1-2 级,除外心脑血管疾病、消化性溃疡病史、哮喘病史。随机分为 3 组,每组 30 例。

1.2 方法

患者入室监测 ECG、NBP、HR、SPO₂、CVP,全麻诱导后插入喉罩行控制呼吸,术中使用丙泊酚复合瑞芬太尼全凭静脉麻醉,脑电双频指数(BIS)控制在 50±5。A 组于手术结束前 15 min 静注地佐辛 5 mg 及氟比洛酚酯 50 mg; B 组于手术结束前

15 min 静注地佐辛 10 mg; C 组于手术结束前 15 min 静注氟比洛酚酯 50 mg,手术结束待患者清醒后拔除气管导管。

1.3 记录项目

记录患者术后 24 h 内镇痛视觉模糊评分(VAS)及恶心呕吐、皮肤瘙痒、呼吸抑制等不良反应发生率,对结果进行统计学分析。

1.4 统计学处理

计量资料以 $\bar{x} \pm s$ 表示,采用 SPSS12.0 统计软件进行 t 检验,计数资料采用卡方检验, $P < 0.05$ 为差异有显著性。

2 结果

三组患者 VAS 评分 A 组 VAS 评分低于 B、C 组,差别有统计学意义($P < 0.05$),见表 1;三组均无皮肤瘙痒、呼吸抑制,嗜睡 B 组 3 例,躁动 B 组 2 例、C 组 1 例,术后恶心呕吐 A 组低于 B、C 组,差别有统计学意义,见表 2。

表 1 术后 VAS 评分

Table 1 Visual analogue scale

Group	8 h	12 h	24 h
A group	3.5± 0.4	3.0± 0.8	3.9± 0.5
B group	4.3± 1.2	3.8± 0.7	4.1± 1.0
C group	5.2± 0.6	4.2± 0.8	4.4± 1.0

表 2 不良反应

Table 2 Side effects

Group	Somnolence	Restlessness	Vomiting
A group	0	0	1
B group	3	2	6
C group	0	1	4

3 讨论

术后疼痛是一种不良刺激,严重者可导致心理改变甚至慢性疼痛出现^[1]。腹腔镜结肠手术由于康复快在临床应用日渐广泛,但传统阿片类由于呼吸抑制及抑制胃肠蠕动使其在胃肠手术术后镇痛使用带来顾虑^[2]。由于腹部切口的存在加之气腹过程中内脏缺血以及术后残存高 CO₂血症可加重局部炎症反应^[3],术后镇痛仍不可忽视。临床应用时阿片类的副作用与剂量呈正比,采用不同机制镇痛可增强镇痛效果同时减少阿片用量即多模式镇痛研究方向。多模式镇痛包括局部神经封闭^[4-7],通过阻断伤害性刺激的产生、传导、受体各个过程达到更好的镇痛效果^[8-10]。目前多模式镇痛最常用的组合为环氧化酶抑制剂结合阿片类,环氧化酶抑制剂为基础用药^[11]。传统环氧化酶抑制剂可抑制炎症因子的产生,起到抗炎、镇痛的作用,但增加术后出血的风险^[12];而氟比洛酚酯由于结构的特异性可特异地聚集于手术切口及内脏及腹腔的损伤处,从而产生靶向镇痛减轻炎症反应^[13],同时由于靶向选择作用减少传统非甾体抗炎药的副作用包括胃肠道刺激^[13-14],由于其不作用于中枢神经没有阿片类药物呼吸抑制的副作用。地佐辛由于受体选择性恶心呕吐发生

率较传统阿片类明显减少,我们联合应用地佐辛及氟比洛酚酯取得很好的镇痛效果,镇痛效果较其他两组好,机制在于阻断伤害性刺激的产生,减轻胃肠道刺激,又减轻伤害性刺激对中枢神经的作用;由于阿片类剂量减少,副作用较其他两组少。地佐辛作为强效镇痛药效果与吗啡相当且有一定的镇静作用^[15],有研究表明联合吗啡使用可减少吗啡副作用^[16],但从研究看单独使用作为术后镇痛评分与其他组相比无优势,原因可能与其增加术后恶心呕吐几率加重切口疼痛有关。本研究中提示多模式术后镇痛在腹腔镜结肠手术应用的可行性,并且有报道称氟比洛酚酯可加快术后肠道功能的恢复^[17],且不增加术后出血风险^[18],显示其在腹腔镜结肠手术具有良好的镇痛应用前景。

手术疼痛分为初始阶段和继发阶段^[19],在初始阶段行疼痛阻滞一般称为超前镇痛。目前研究限于腹腔镜结肠手术疼痛的继发阶段,可否在初始阶段进行干预有待进一步研究,且超前镇痛在手术时间过长的病例中应用是否可行有待进一步研究;同时本文研究局限于联合不同药物行多模式镇痛,可在此基础上考虑联合局部神经阻滞,以期取得更为理想的镇痛效果。但长期使用环氧化酶抑制剂增加消化性溃疡及严重心血管事件发生率^[20],值得临床警惕,我们建议此类药物使用不应超过 3

天。

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