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论著

围术期静脉注射氟比洛芬酯在乳腺切除术后慢性疼痛中的作用

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摘要:

目的: 探讨围术期静脉注射氟比洛芬酯能否降低乳腺癌术后慢性疼痛的发生率和疼痛程度。方法: 采用随机、双盲、对照的研究方法, 入选60位在全麻下行乳房切除及腋窝淋巴结清扫的患者。术前1 d通过医院焦虑抑郁量表(HAD)评估所有患者的抑郁和焦虑。患者被随机均分为F组和对照组, 切皮前15 min和6 h后分别给予F组氟比洛芬酯50 mg静脉注射, 对照组脂肪乳剂5 mL静脉注射。术后2组患者均接受芬太尼静脉自控镇痛。术前、术后4 h和24 h分别抽取外周静脉血检测血浆中PGE_2和TNF-α的水平。观察并记录术后2, 6, 12, 24和48 h疼痛的数字等级评分(NRS)、芬太尼的剂量和不良反应。电话随访术后2至12个月期间疼痛的持续时间和强度。结果: 术后2, 4, 6, 12个月时疼痛的发生率分别为33%, 20%, 15%, 10%, 平均疼痛强度分别为0.77, 0.57, 0.28, 0.18。F组术后2, 4, 6和12个月时疼痛的强度均明显低于对照组(F=7.758, P=0.007), F组术后2, 4和6个月时疼痛的发生率也明显低于对照组(P<0.05), 12个月时慢性疼痛的发生率与对照组比较无明显差异(P>0.05)。术前、术后4 h和24 h两组患者血浆TNF-α的浓度无差异(F=0.530, P=0.470), 但F组血浆PGE_2的浓度明显低于对照组(F=5.646, P=0.021)。术后无1例患者发生异常出血、消化性溃疡、肝肾功能减退和呼吸抑制等不良反应。结论: 围术期100 mg氟比洛芬酯静脉注射能降低乳腺癌术后慢性疼痛的发生率和强度。

关键词: 围术期 氟比洛芬酯 乳腺癌 慢性疼痛

Effect of perioperative intravenous flurbiprofen axetil on chronic postmastectomy pain

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Abstract:

Objective: To explore whether perioperative intravenous flurbiprofen axetil can reduce the incidence and intensity of chronic pain for breast cancer after surgical treatment.
Methods: This randomized, double-blind, controlled trial enrolled 60 patients undergoing mastectomy and axillary lymph node dissection under general anesthesia. All patients accepted Hospital Anxiety and Depression Scale (HAD) tests the day before the surgery to evaluate depression and anxiety. The patients were randomly assigned to receive either 50 mg flurbiprofen axetil intravenously 15 minutes before the surgical incision and 6 hours later (group F) or intravenous 5 mL intralipid as a control (group C). All patients received patient-controlled intravenous analgesia (PCIA) with fentanyl postoperatively. Peripheral venous blood samples were drawn before the surgery, at 4 and 24 h after the surgery to detect the plasma level of PGE_2 and tumor necrosis factor-α (TNF-α). Postoperative fentanyl consumption, Numerical Rating Scale (NRS) scores and adverse effects were recorded at 2, 6, 12, 24 and 48 h after the surgery. The duration and intensity of pain were followed up by telephone at the 2nd-12th month after the surgery.
Results: The incidence of pain at 2, 4, 6, and 12 months after the breast surgery was 33%, 20%, 15%, and 10%, respectively, and the average pain score was 0.77, 0.57, 0.28, and 0.18, respectively. Compared with group C, the scores of pain in group F were significantly lower at 2, 4, 6 and 12 months postoperatively (F=7.758, P=0.007). The incidence of pain in group F was significantly lower at 2, 4 and 6 months postoperatively (P<0.05). There was no significant difference in the incidence of pain between the groups at 12 months postoperatively (P>0.05). Preoperatively and at 4 and 24 h after the surgery, there was no significant difference in the level of TNF-α between the two groups (F=0.530, P=0.470); but plasma concentration of PGE_2 in group F was significantly lower than that in group C (F=5.646, P=0.021). No patients developed abnormal bleeding, peptic ulcer, impaired liver or renal function and respiratory depression.
Conclusion: Perioperative intravenous infusion of 100 mg flurbiprofen axetil can decrease the intensity and incidence of chronic pain for breast cancer after surgical treatment.

Keywords: perioperative period flurbiprofen axetil breast cancer chronic pain

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