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Letter to Editor

Dezocine can Alleviate Depression of Breast Cancer

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To the editor,

Breast cancer is a common tumor in women in the world and more likely to concurrent depression with the incidence. of 38.2%-44.2%.Depression can the decline of the quality of life of patients and their families, decrease the compliance to cancer treatment, and even directly lead to suicide. Sufentanil and dezocine were widely used in postoperative analgesia with the comparable analgesia effects.But the effects of both on depression in breast cancer surgery patients is not clear.A total of 80 patients in the Second People's Hospital of Foshan of Guangdong Province who received patient-controlled intravenous analgesia with dezocine 1.5mg/kg or sufentanil 1.5μg/kg were divide into DE group and SF group respectively,with 40 cases in each group. All patients underwent modified radical mastectomy under general anesthesia. There was no statistical difference of VAS scores at 24h and 48h after surgery between the two groups (All $P>0.05$).The HAMD scores at 24h and 48h after surgery in DE group were significantly lower than those in SF group(All $P<0.05$).

Our study found that dezocine was comparable to sufentanil in terms of the overall analgesic effect.Therefore, our study excluded the effect of pain on depression We also found dezocine could reduce the HAMD scores of patients undergoing breast cancer surgery more effectively,compared with sufentanil .Zhao Peng et al.found that patients with dezocine + sufentanil had the lower Beck depression scores and anxiety scores, and better sleep quality than sufentainil alone which indirectly indicating the antidepressant effect of dezocine [1].

As we known 5-HT and/or NA reuptake inhibitors such as Duloxidine have been widely used to treat depression[2].And the KOR antagonists such buprenorphine [3]also have shown efficacy in the treatment of anxiety and depression.Dezocine is a 5-HT and NA reuptake inhibitor and a partialκreceptor agonist, which may have great potential for antidepressant effects [4].Meanwhile, the antidepressant effect of dezocine has also been confirmed in a mouse models, which is associated with κ receptor and 5-HT1A[5]. Our clinical studies have preliminarily confirmed this result in breast cancer patient undergoing surgery.

Keywords: Breast Cancer; Dezocine; Sufentanil; Depression

Conflict of interests: There are no conflicts of interest to declare

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