Effects of dezocine combined with sufentanil self-controlled analgesia on serum betaendorphin content, inflammation and oxidative stress reaction after lobectomy

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To study the effect of dezocine combined with sufentanil self-controlled analgesia on serum betaendorphin content, inflammation and oxidative stress reaction after lobectomy. Methods: A total of 130 cases of lung cancer received lobectomy in our hospital from 2013 April to 2014 July were enrolled and randomly divided into two groups according to different analgesia methods. Observation group received dezocine combined with sufentanil analgesia, control group received sufentanil analgesia. Then serum beta endorphin content, inflammatory cytokines and oxidative stress reaction were compared. Results: At 6 h, 12 h, 24 h, 36 h after operation, serum β-endorphin content of observation group were lower than those of control group. Serum MCP-1, HMGB-1, TNF-α content of observation group were lower than those of control group. Serum GSH-Px, Cu-Zn SOD contents of observation group were higher than those of control group; Cor, E content were lower than those of control group. Conclusion: Dezocine combined with sufentanil self controlled analgesia is helpful to relieve postoperative pain, reduce β-endorphin content, control inflammation and oxidative stress reaction. It's an ideal analgesia method after pulmonary lobectomy.

[KEY WORDS] Pulmonary lobectomy; Dezocine; β-endorphin; Inflammation reaction; Oxidative stress reaction