Clinical study of Modified Xiaochengqi Decoction in Perioperative Period of Cholelithiasis: A Randomised Controlled Trial

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Research

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Abstract

Background Modified Xiaochengqi Decoction is a new prescription designed by the author to add astragalus, frankincense and myrrh on the basis of the classic Xiaochengqi Decoction based on the characteristics of biliary tract surgery, and it has been used for clinical differentiation. Therefore, in order to evaluate the clinical effect of Modified Xiaochengqi Decoction in perioperative period of cholelithiasis, this study conducted a prospective randomized controlled study.

Methods A total of 162 patients with cholelithiasis were randomly divided into three groups. Modified Xiaochengqi Decoction group: ERAS process + Modified Xiaochengqi decoction. Xiaochengqi Decoction group: ERAS process + Xiaochengqi decoction. Control group: ERAS process + warm boiled water 50ml. Compare the clinical indicators, immune indicators and acute inflammatory stress response indicators between the three groups, and observe the adverse reactions of traditional Chinese medicine.

Results Clinical indicators In the Modified Xiaochengqi Decoction group, the postoperative VAS pain scores was decreased, the postoperative activity time and activity distance was increased, the feeding time was advanced, the recovery of gastrointestinal function was advanced, the postoperative cost and postoperative hospital stay was reduced and the incidence of nausea and vomiting was reduced ($P < 0.05$). There was no serious adverse reaction in Modified Xiaochengqi Decoction. Immune indicators On the 1st and 2nd day after operation, the expression of CD3+, CD4+, CD19+ and the ratio of CD4 + / CD8 + in the Modified Xiaochengqi Decoction group was higher than that in the Xiaochengqi Decoction group and the control group. The expression of CD8+ and NK cell was not statistically different between the three groups ($P > 0.05$). A cute inflammatory stress response indicators On the 1st and 2nd day after the operation, the expression of IL-6, CRP and SAA in the Modified Xiaochengqi Decoction group was lower than that in the control group, and the expression of substance P was higher than that in the control group ($P < 0.05$). There was no significant difference in IL-10 expression between the three groups ($P > 0.05$).

Conclusions Modified Xiaochengqi Decoction relieved the inflammatory response and improved the immune function in the perioperative period, and promoted postoperative rehabilitation. Moreover, there was no serious adverse reaction in Modified Xiaochengqi Decoction.

Trial registration This study is registered at Chinese Clinical Trial Registry. The registration identification number is ChiCTR2000033125. Registered 25 May 2015
Retrospectively registered, <http://www.medresman.org.cn/ChiCTR2000033125>.

Full Text

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Figures

Figure 1

Flow diagram of the study protocol

Figure 2

Flow cytometry of peripheral blood CD3+ -CD4+ in perioperative period of biliary tract. A: 1d before operation; B: 1d after operation; C: 2 d after operation; D: 5d after operation.

Figure 3

Flow cytometry of peripheral blood CD3+ -CD8+ in perioperative period of biliary tract. A: 1d before operation; B: 1d after operation; C: 2d after operation; D: 5d after operation.

Figure 4

Flow cytometry of peripheral blood CD3+ -CD19+ in perioperative period of biliary tract. A:1d before operation; B:1d after operation; C:2d after operation; D:5d after operation.