# Meta-analysis of fibrin glue used in thyroid surgery. [Chinese]

Authors: Hua D., Guo Z.-J.

Publication Date: 2014

## Abstract:

Background: Fibrin glue can function to close the wound tissue, reduce leakage, stop bleeding, promote wound healing and prevent adhesion. Objective: To systematically review the application of fibrin glue in thyroid surgery. Methods: We searched China Journal Net database, Wanfang database, VIP database, Chinese Biomedical Database Online to retrieve clinical randomized controlled trials related to fibrin glue applied in thyroid surgery from January 2000 to April 2013. Included studies were analyzed using Rev Man 5.2 statistical software for Meta-analysis. Results and Conclusion: A total of six studies including 797 cases were enrolled in result analysis. Meta-analysis showed that the drainage volume at postoperative day 1 and total postoperative drainage volume were higher in the fibrin glue group than the control group (without fibrin glue) [odds ratio=-27.36, 95% confidence interval (-33.86, -20.87), P< 0.00001; weighted mean difference=-38.73, 95% confidence interval (-44.78, -32.67), P< 0.000 01]. The suture removal time was shorter in the fibrin glue group than the control group [odds ratio=-2.00, 95% confidence interval (-2.17, -1.83), P< 0.000 01]. No significant difference was found in the postoperative 3-day fever incidence [odds ratio=1.53, 95% confidence interval (0.59, 3.96), P=0.38], wound infection [odds ratio=0.86, 95% confidence interval (0.12, 6.15), P=0.88], and postoperative hematoma [odds ratio=0.86, 95% confidence interval (0.21, 3.48), P=0.83] between the two groups. These findings indicate that fibrin glue used in thyroid surgery can significantly reduce drainage by non-increasing postoperative complications.