Influencing factors of adhesion development and the efficacy of adhesion-preventing agents in patients undergoing laparoscopic myomectomy as evaluated by a second-look laparoscopy.

Authors: Takeuchi H., Kitade M., Kikuchi I., Shimanuki H., Kumakiri J., Takeda S.

Publication Date: 2008

Abstract:

Objective: To examine the factors influencing the development of adhesions after laparoscopic myomectomy (LM) and the efficacy of adhesion-preventing agents. Design: Prospective nonrandomized study. Setting: University-affiliated hospital. Patient(s): Three hundred seventy-two patients who underwent LM alone by the same surgeon between 2000 and 2005 were included for the analysis in this study. Intervention(s): Video tape recording was performed during the second-look laparoscopy (SLL) to evaluate the postoperative uterine wound adhesions and adhesions around the uterine adnexa. Statistical workup was conducted using logistic regression analysis. Main Outcome Measure(s): Evaluation of adhesions at the uterine wound and of de novo adhesions of the uterine adnexa by SLL. Result(s): The SLL revealed uterine surgical wound adhesions in 141 patients (37.9%) and de novo adhesions of the uterine adnexa in 33 patients (8.9%). The results of analysis to determine the factors influencing the development of postoperative adhesions revealed that the diameter of the largest myoma, number of myomas, and type of adhesion-preventing agent used (except for fibrin sheath, which had no effect) influenced the incidence of postoperative adhesions at the surgical wound, but only the diameter of the largest myoma influenced the incidence of de novo adhesions of the uterine adnexa. Conclusion(s): Development of surgical wound adhesions after LM can be prevented by the use of an appropriate adhesion-preventing agent. © 2008 American Society for Reproductive Medicine.