Comparison of Outcomes between Closure versus Non-Closure Visceral and Parietal Peritoneum during Cesarean Section: A Randomized Clinical Trial

Introduction: There are many techniques for cesarean sections that each of them has different outcomes. Some clinicians advocate close and some advocate open the visceral and parietal peritoneum. There was different idea about this subject and decided to compare some short term outcomes of two different techniques, closure versus non closure visceral and parietal peritoneum during cesarean section.

Methods: This randomized double-blind controlled trial was conducted on 80 term pregnant women who underwent for first elective cesarean section in Amir-Almomenin hospital in Semnan, Iran from October 2011 to December 2012. Patients were randomly divided into two groups. In one group parietal and visceral peritoneum were closed (control group) and in second group both layers were left open (study group). All cases underwent cesarean section with spinal anesthesia and the surgery was performed by the same surgeon. The severity of pain was measured over the first 24 hours after operation by visual analogous scale and the dosage of analgesic use, the bowel transit time and wound infection during first week after operation were assessed and compared in both groups. Data were analyzed using SPSS software version 16 and chi-square, Mann-Whitney, Wilkinson, t-test and repeated measures ANOVA tests. P value less than 0.05 was considered significant.

Results: The pain score (p<0.001), the mean usage of analgesic over 24 hours (p=0.012) and bowel transit time (p= 0.001) in non-closure group was significantly less than closure group. But wound infection was similar in both groups(p= 1).

Conclusion: The technique of non-closure of peritoneums has some short term postpartum benefits such as less post operation pain, less amount of analgesic use and more rapid bowel transit time.