Abstract

Introduction: The repair of incisional, umbilical, and primary ventral hernia remains a challenge, traditionally; laparoscopic ventral and incisional hernia repairs have been performed with mesh by forming a bridge between defect’s hernia edges. Some ones around the world started to close the defect before reinforcement mesh placement, lowering the complications and hernia recurrence. The aim of this study is demonstrate our experience in the field of laparoscopic ventral and incisional hernia repair with defect closure before reinforcement mesh placement at Texas Endosurgery Institute.

Materials and methods: We performed a prospective study at Texas Endosurgery Institute, from February 1991 to March 2015, all the patients that underwent laparoscopic ventral, incisional, and umbilical hernia repair with defect close and mesh placement were included in this study, and the information was analyzed.

Results: A total of 1512 patients were included in the study, 680 (44.9%) were male and 832 (55.1%) were female. 936 (62%) were laparoscopic ventral and incisional hernia repair, 556 (37%) laparoscopic umbilical hernia repair, and 20 Spigelian hernia repair. All of them with defect closer before mesh placement. 249 (16.5%) had type 2 Diabetes, 40 (2.7%) had chronic obstruction pulmonary disease COPD, we found 38 (2.53%) recurrences, 33 of them in incisional and ventral hernias repaired, and 5 of them in umbilical hernias repaired. 8 of the recurrences had COPD. Surgery length was 58 min (45 – 340), and surgery blood loss was 22 ml (10 – 250 ml).

Conclusions: We have demonstrated that the hernia defect close before mesh placement in laparoscopic ventral, incisional, and umbilical hernia repairs is safe and feasible, and decreases seroma formation, infection, and recurrence hernia rates.