



SWSC 2020 On-Demand Meeting Abstracts

10. LAPAROSCOPIC HIATAL HERNIA REPAIR AS SAME DAY SURGERY: FEASIBILITY, SHORT TERM OUTCOMES, COSTS

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Background: Laparoscopic hiatal hernia repair is commonly performed with 1 night hospitalization. The aim was to assess feasibility, short term outcomes and costs of laparoscopic hiatal hernia repair as same day surgery (SDS).

Methods: The costs and short term outcomes of procedures as SDS were compared to repairs with hospital stay < 24-hour: observation (OBS) and to repairs with hospital stay \geq 24-hour: inpatient (INP). Values are presented as median and interquartile range, and costs are presented as medians. An ERAS protocol with control of nausea and pain was applied. Outcomes were assessed by postoperative 30-day ER visits and readmissions. SDS was planned for all elective repairs after 04/13/17 in patients with age \leq 75 with type I-III hiatal hernia, and type IV with no major comorbidities and without 100% intrathoracic stomach.

Results: From 10/11/2016 to 08/27/2019 there were 262 laparoscopic hiatal hernia repairs. The reoperative repairs (n=50) were excluded and 212 procedures in 209 patients (3 reoperative repairs during the same admission) were included. There were 66 SDS, 65 OBS and 81 INP. SDS was planned in 114 patients and was performed in 66/114 (57.9%) and not performed in 48/114 (42.1%): 30/48 (62.5%) were transitioned to OBS, 18/48 (37.5%) were transitioned to INP. The most common reason for transition from SDS to OBS was patient preference in 9/30 (30.0%) followed by neck and shoulder pain because of CO₂ insufflation in 8/30 (26.7%). The most common reason for transition from SDS to INP was distension/ileus in 6/18 (33.3%) followed by abdominal pain: 4/18 (22.2%). SDS vs. OBS: age 55 (45-63) vs. 66 (57-71) p<0.0001. There was no difference in gender/BMI/ASA between the 2 groups. Hernia size: 5 (4-5) vs. 6 (4-9), p< 0.007, duration of operation: 99.5 (92-116) vs.113 (93-130), p=0.474. Cost/patient: Total: \$6,427 vs. \$10,597, p< 0.001, direct: \$5,353 vs. \$8,154, p<0.001, operating room: \$3,110 vs. \$3,643, p<0.001, hospital bed: none vs. \$1,578. 30-day post-operative ER visits: 9/66 (13.6%), vs. 9/65 (13.8%), p=0.798, and readmissions for related symptoms: 7/66 (10.6%) vs. 6/65 (9.2%), p=0.625. SDS vs. INP: age 55 (45-63) vs. 70 (60-76), p<0.001. There was no difference in gender and BMI between 2 groups. ASA III: 20/66 (30.3%) vs. 63/81 (77.8%), p<0.024, type I HH: 45/66 (68.2%) vs. 14/81 (17.3%), P < 0.004, type IV: 8/66 (12.1%) vs. 49/81 (60.5%), p<0.001. Size of hiatal hernia: 5 (4-5) vs. 8 (4.5-9), p< 0.001, duration of operation: 99.5 min (92-116) vs. 114 (99-132), p=0.799. Cost/patient: Total: \$6,427 vs. \$18,716, p<0.001, direct : \$5,353 vs. \$13,613, , p<0.001, OR: \$3,110 vs. \$4,167, p<0.001, hospital bed: none vs. \$5,293. Excluding 3 patients who had recurrence during the same admission, the cost comparison remained significant. 30-day post-operative ER visits: 9/66 (13.6%), vs.12/78 patients (15.4%), p=0.173, and readmissions for related symptoms: 7/66 (10.6%) vs. 6/78 patients (7.7%), p=0.376

Conclusion: Laparoscopic hiatal hernia repair can be performed as same day surgery in selected group of patients with comparable short term outcomes and reduced cost.