

Abstract

TRENDS IN ROBOTIC PORT CLOSURE BY SURGICAL SPECIALTY. L Le, University of Colorado School of Medicine, J Arruda, Department of Obstetrics & Gynecology, University of Colorado School of Medicine

Background: We have found that physicians are variable on the decision of fascial closure of 10/12 mm assistant port-sites after robotic surgery. The goal of this study is to determine if the rate of assistant port fascial closure differs by surgical specialty. Furthermore, since port-site herniation is a recognized complication following robotic-assisted procedures, subsequent analysis aims to assess the relationship between 10/12 mm port-site incision fascial closure and the rate of port-site hernias after a robotic-assisted surgery.

Methods: Retrospective chart review from 2016 to 2019 of patients undergoing robotic surgery by gynecologists, urologists, and general surgeons in which a 10/12 mm assistant port was used.

Results: A total of 519 patients underwent robotic assisted laparoscopy for gynecologic, urologic, and general surgery procedures during the study period. Gynecologists were most likely to suture close the 10/12 mm fascial ports with 99% closure rate. Urologists and general surgeons were less likely to close the 10/12 mm fascial port site with a 23% and 90% closure rate, respectively. There was a statistical difference between the surgical services in the decision to close a 10/12 mm fascial port site, with gynecologists closing the port site at higher rates than the other surgical specialists ($P < 0.001$). The overall hernia rate was low for all cases at 0.8%. The fascial hernia rate was 0% for gynecological procedures, 1.1% for urological procedures, and 0% for general surgery procedures. There was no difference between the hernia rates between the surgical specialties. There was also not a difference between the hernia rates whether the assistant port-site fascia was closed or not (0% vs 1.4%).

Conclusions: Gynecologists are more likely than urologists and general surgeons to suture close the 10/12 mm fascial port sites. There was no difference in hernia rates between the surgical specialties despite the difference in the decision on whether or not to close the fascia.