



New Challenges for a Core Procedure: Development of a Faculty Workshop for Skills Maintenance for Abdominal Hysterectomy

Lori R. Berkowitz, MD,* Kaitlyn James, PhD,[†] Emil Petrusa, PhD,[‡] Carey York-Best, MD,* and Anjali J. Kaimal, MD, MAS*

*Massachusetts General Hospital, Vincent Obstetrics and Gynecology, Boston, Massachusetts;

[†]Massachusetts General Hospital, Deborah Kelly Center for Outcomes Research, Vincent Obstetrics and Gynecology, Boston, Massachusetts; and [‡]Massachusetts General Hospital, Department of Surgery, Boston, Massachusetts

OBJECTIVE: To describe the development of a low-cost educational module for OB/GYN faculty skills maintenance for total abdominal hysterectomy (TAH), a low frequency core procedure in obstetrics and gynecology.

DESIGN: After review of existing educational tools and utilization of a modified Delphi method to establish consensus regarding key procedural components for skills maintenance, a 2-hour workshop was developed to review knowledge and participate in a simulation focused on the critical steps in performing TAH. An expert in TAH delivered a lecture highlighting important surgical considerations. Participants then rotated through simulation stations for critical steps in TAH: dissecting the bladder, identifying the ureter, and closing the cuff. Knowledge gains were assessed with a written pre- and posttest. Consecutive focus groups were conducted with participants on effectiveness of the workshop, and suggestions for improvement. Ideas identified in the first focus group were incorporated into the second workshop.

SETTING: Massachusetts General Hospital, an academic tertiary care facility with a single Obstetrics and Gynecology faculty group, located in Boston, Massachusetts.

PARTICIPANTS: Eligible participants were recruited via email from full time specialists in General Obstetrics and Gynecology at Massachusetts General Hospital. Of the 25 eligible gynecology faculty subjects, 22 participated (88%).

Funding sources: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Correspondence: Inquiries to: Lori R. Berkowitz, MD, Massachusetts General Hospital, 55 Fruit Street, Founders 4, Boston, MA 02114; e-mail: lberkowitz@partners.org, lberkowitz@mgh.harvard.edu

RESULTS: On pre or post-test comparison, 70% of participants scored higher on the posttest, demonstrating an increase in knowledge of critical TAH surgical steps. Focus group analyses identified the need for increased review and training demonstrations of TAH, and recommended continued offering of the workshop.

CONCLUSIONS: Based on focus group responses and pre or posttest comparisons, the workshop was deemed feasible and enhanced short-term learning. Future directions include utilizing more challenging anatomic models and simulation scenarios and optimizing integration of expert demonstration and individualized coaching, as well as identifying regionally tailored surgical workshop programming. (J Surg Ed 75:942-946. © 2018 Association of Program Directors in Surgery. Published by Elsevier Inc. All rights reserved.)

KEY WORDS: hysterectomy, curriculum, simulation, faculty development

COMPETENCY: Patient Care

INTRODUCTION

The current threats to surgical training in Obstetrics and Gynecology residency programs, particularly with regard to hysterectomy, have been well described in the literature.¹⁻⁴ There has been a sharp decline in the number of open abdominal hysterectomies (TAHs) performed annually.⁵⁻⁸ As in other surgical fields, reasons include increasing medical treatment options for conditions traditionally treated surgically, and increasing utilization of minimally

invasive surgical approaches. While this shift towards less invasive approaches is associated with improved health outcomes including decreased length of hospital stay, decreased recovery time, and a more expedient return to presurgical activities, it has also resulted in a limited number of cases of TAH performed per year.

Importantly, a practitioner who is not confident or experienced in an elective procedure (such as total vaginal hysterectomy or laparoscopic hysterectomy) may choose not to offer this procedure, and this self-selection is both expected and perhaps even desirable. In contrast, a total TAH is often not an elective procedure: whether for obstetric hemorrhage, myomectomy hemorrhage, lateral perforation during abortion, or uncontrolled hemorrhage from vaginal or laparoscopic hysterectomy, any obstetric or gynecologic provider could be faced with the need for emergent conversion to TAH as a life-saving measure. While there is no recognized “acceptable” number of cases per year mandated to maintain TAH privileges, maintaining and demonstrating a level of competence in this technique is essential for providers to continue safely performing what has become an increasingly rare procedure. Maintenance of this core procedural skill is also central to ensuring appropriate teaching and supervision of residents.

The purpose of this study is to describe the development and pilot evaluation of a TAH workshop aimed at the preservation and demonstration of critical skills for the low volume academic OB/GYN faculty surgeon.

MATERIALS AND METHODS

The 3 most critical steps in performing total TAH were identified through review of existing educational tools and expert consensus as defined by an iterative process using a modified Delphi procedure. The Delphi method is an iterative process that solicits the opinions of experts through a series of questionnaires interspersed with information and opinion feedback until a convergence of opinion is observed.⁹ It is a process for determining expert group consensus where there is no definitive evidence and where opinion is important. In this case, a comprehensive list of surgical steps performed during total TAH was compiled using literature review and open-ended questionnaires sent to high volume OB/GYN and Gynecologic Oncology surgeons. Following this, 2 rounds of email questionnaires asking expert participants to identify the most critical steps were performed, and consensus was built from the feedback provided during the preceding rounds. The 3 steps identified were dissection of the bladder from the anterior surface of the uterus, identifying the ureter in the retroperitoneum, and closing the vaginal cuff. Based on this information, a 2-hour surgical skills workshop was developed to target (1) review of anatomical and physiological knowledge regarding TAH, and (2) psychomotor practice of these 3 critical steps

with a low-cost, handmade simulator. The workshop was administered twice to accommodate participants' schedules and availability.

Full time specialists in the General Obstetrics and Gynecology division at Massachusetts General Hospital who had gynecologic operating privileges were eligible for the study. Participation was voluntary. Eligible faculty received an email detailing the voluntary nature of the workshop, its goals and activities, and anticipated anonymous data collection. As stated in the invitation letter, consent was implied by agreement to participate. The Partners Healthcare Institutional Review Board reviewed this study and classified it as exempt.

A 25-item knowledge test that addressed preoperative considerations, patient positioning, intraoperative, and postoperative complications was administered before and after each workshop. Demographic information and information about each participant's current surgical volume were also collected. Finally, confidence in one's knowledge base as well as comfort with teaching TAH were assessed via self-report. No participant identifiers were collected; a randomly generated subject ID was used to anonymously link pre- and posttest results.

Three low-cost simulators were developed for the workshop. To mimic taking down the bladder, simulator A used latex condoms that were both rubber cemented (for filmy adhesions) and crazy-glued (dense adhesions). A small amount of methylene blue stained water was placed in the condoms to ascertain cystotomy when it occurred. To mimic sewing the vaginal cuff (Figure 1), simulator B was developed via a 2-l soda bottle that was cut midway and placed upside down into the other half of the bottle for stability. A piece of cloth simulating the vaginal cuff was inserted through the neck of the bottle for stability and sewing into a deep space was simulated. Simulator C gave participants the opportunity to model dissecting the retroperitoneum and identifying the ureters (Figure 2). A plastic bowl was used as the pelvis with cording and plastic tubing utilized as ureters and great vessels, respectively. Model magic clay was used to create a uterus with adnexae, with felt utilized to simulate the tubes (for structural identification). Filmy cotton overlay was used to mimic areolar retroperitoneal tissue that would be encountered upon cutting into the retroperitoneum to identify the ureters.

After the pretest, a high volume TAH surgeon from the division of Gynecologic Oncology delivered a lecture about considerations in performing TAH. Participants then rotated through the 3 simulation stations. The post-test was then completed, after which an educational researcher conducted a focus group on effectiveness and relevance of the workshop. Workshop instructors were not present for the focus group discussion. Differences in pre- and posttest scores were determined, while comments from focus groups were summarized and submitted to the

Download English Version:

<https://daneshyari.com/en/article/8834649>

Download Persian Version:

<https://daneshyari.com/article/8834649>

[Daneshyari.com](https://daneshyari.com)