Developing Resident Competence in Abdominal Hysterectomies Despite Declining Surgical Opportunities

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1. THE CHALLENGE
In our region, an increase in laparoscopic and vaginal hysterectomies has resulted in a significant decrease in the number of abdominal hysterectomies available for our residents.

Our challenge is to ensure that residents develop competence in this important procedure despite significantly fewer opportunities. So it is essential that residents are fully prepared to take advantage of each opportunity.

Our solution has been to develop a comprehensive simulation training program focused on the abdominal hysterectomy procedure.

2. THE PLAN
An intensive simulation training program was developed by Dr. David Kushner (Gyn Onc Division Chief) and Dr. Heather Einstein (Gyn Onc Fellow) to fully prepare residents for their abdominal hysterectomy opportunities in the OR. The simulation training has two parts: in the summer we conduct a two-day comprehensive simulation workshop; and in the spring we conduct an abbreviated version of the lab.

Summer Lab
This workshop is attended by all 24 residents and is conducted on our didactic day for two consecutive weeks.

Day 1: (3 hours)
• video of abdominal hysterectomy with faculty commentary
• review of instruments and their proper use in the procedure
• patient positioning and draping
• proper set-up and use of Bookwalter retractor
• practice of laparotomy incision and suturing technique

Day 2: (2 hours)
• video of abdominal hysterectomy with faculty commentary
• review of Bovie machine
• review procedure for ab hyster on home-made simulator
• residents pair up on 12 simulators
• Gyn Onc fellows and faculty provide instruction for procedure.

Spring Lab
The spring session is conducted for eight residents at a time over a three week period.

• video of abdominal hysterectomy with faculty commentary
• review of instrument tray
• practice of proper technique on ab hyster simulators.
• a minimum of 3 faculty attend each session

3. THE SIMULATOR
Despite resembling a Halloween centerpiece more than a surgical simulator, this device has proven to be very effective. Developed by Drs. Haas and Raft at Indiana University School of Medicine, it is inexpensive and easy to construct. Instructions are available at: http://obgyn.medicine.iu.edu/index.php?cID=323.

The simulator shown here includes modifications suggested by our faculty and fellows.

4. RESULTS
These abdominal hysterectomy simulation labs have been well received by residents and faculty. The result of the training has been an increase in resident opportunities to perform in the role of surgeon during abdominal hysterectomies.

Due to the training, residents profess confidence in approaching the procedure. Likewise, the faculty have increased confidence in the residents’ ability.

The following quotes reflect the positive results of this training.

“Resident performance for the ab hyst has improved light years since they completed their training in the sim lab. And faculty have noticed a marked improvement in resident confidence and competence.”
Gyn Onc Faculty

“Since we began the ab hyst sim labs the faculty have more confidence in our abilities and they are giving us more opportunities in the OR.”
PGY-3 Resident

5. FUTURE PLANS
The trend regarding hysterectomies in our region is unlikely to change. And since the ab hyst simulation labs have created a very positive reinforcing influence, we plan to continue to provide the labs twice a year.

Training alone is not enough to ensure competence. We are developing a focused evaluation for the abdominal hysterectomy procedure, which we plan to introduce in the coming academic year.

Our simulation lab is currently in the fourth year of operation under the direction of Dr. Ellen Hartenbach. Our curriculum includes surgical skills, obstetric skills, obstetric emergency management, and numerous office procedures. The regular sim lab schedule runs September through May with special training workshops held during the summer months. For more information about our lab, the simulator, or this poster contact John Street at jpsstreet@wisc.edu