

Editorial referring to the paper: Preece R. The current role of simulation in urological training. Cent European J Urol. 2015; 68: 207-211.

## The ‘complements’ to virtual simulation

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With the advancement of minimally invasive procedures in urology, the goal is to train a urologist who is highly competent and confident in performing these techniques. Because of the specific risks, visuo-spatial relationships, and the steep learning curve that is unique to laparoscopy, hands-on training on a box or a visual simulator is the recommended way to start learning laparoscopic skills.

However, as Preece et al. [1] stated in their interesting article, simulation should complement other essential components of urology training programs such as participation in mentorship schemes and clinical fellowships, which also aid progression along the learning curve. Residents who are willing to perform laparoscopic surgery should train their laparoscopic skills on a regular basis. Previous research by Stolzenburg et al. [2] suggested that those who are willing to learn laparoscopic prostatectomy should practice daily on a pelvic trainer, especially knot tying and suturing. Laguna et al. [3] stated that it is almost impossible to finalize the residency training as a qualified laparoscopic surgeon. Based on the low level of laparoscopic skills displayed by last year’s residents, it is advisable that those who are willing to perform laparoscopy as a urologist should improve their training and exposure to laparoscopy during residency or should consider a fellowship in laparoscopic surgery.

Cadaveric educational programs are unique programs that may simulate real clinical experience in the operating room. In Turkey, this dedicated educational program consists of 3 main theoretical and practical parts and many subtopics. The cadaveric educational program allows all urology residents to perform basic and complex surgical operations on fresh frozen cadavers. The surgeries that may be performed as an example include simple procedures such as prostatic biopsies to complex laparoscopic procedures such as partial nephrectomy. This program is still in continuous growth and we hope to be able to expand it over all of Europe.

There are several circumstances that may reduce the number of procedures according to the training of the surgeons such as: 1) the development of their individual laparoscopic skills, 2) the access to simulator training, 3) animal or cadaveric training and 4) clinical experience with an experienced mentor [4]. Also, the importance of training with animals has been published in the past [5]. Following the La Paz University Hospital training program, every kind of training in laparoscopic surgery is desirable, but a scheduled program with a frequent presence in the operating room and a constant suture training on the simulators, ensures a consistent training in laparoscopic urological surgery.

### References

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