VIRTAMED



Ja "4 4 44

VirtaMed LaparoS[™] Next generation laparoscopic training

Photorealistic

- High fidelity visualisation
- Simulation of entire abdomen including correct physical behaviour of all organs

Realistic positioning

- Patient positioning including (Reverse-)Trendelenburg
- Team training for a surgeon and camera assistant

Motivational training

- Condensed training steps based on a pedagogical teaching concept
- Focus on important surgical skills, pathologies & complications
- Competency-based performance feedback

Authentic feeling

- Free trocar placement and insertion of replica instruments
- New active trocars provide realistic tactile sensation



sales@virtamed.com

VIRTAMED

LaparoS™ motivational training concept

Full Cholecystectomy training procedure



Retracting the liver

Grasping infundibulum of gallbladder

Dissecting peritoneal covering

Establishing the critical view of safety

Safe clip application

Safe cutting techniques

Complication handling

Detaching gallbladder

Removing gallbladder

Bleeding control

LaparoS[™] condensed training



Safe clip application and cutting techniques repeated until trainee reached defined proficiency level

Condensed training sequences of around 5 minutes teach transferable key skills. Each sequence takes place in a realistic environment and can be repeated until the trainee attains a proficiency level.

Scientific research¹ and experience demonstrate that short training scenarios are more likely to be repeated and such targeted repetition accelerates training outcomes. As a result, a trainee makes the most out of the training experience using LaparoSTM.

¹Websky MW, Raptis DA, Vitz M, Rosenthal R, Clavien PA, Hahnloser D. "Access to a Simulator is Not Enough: The Benefits of Virtual Reality Training Based on Peer-Group Derived Benchmarks - A Randomized Controlled Trial.", World Journal of Surgery (2013) vol.37, no. 11, p.2534-2541.

VIRTAMED

Highly condensed training cases

General Surgery

- Establishing the critical view for a safe cholecystectomy
- Cystic pedicle dissection and safe clipping
- Gallbladder resection using various techniques
- Control of hemorrhage in the liver bed
- Skeletonizing the appendix to prepare for ligation
- Vascular control of appendicular artery
- Diagnostic of an incisional hernia
- Lysis of adhesions to an incisional hernia site

Gynecology

- Diagnostic laparoscopy and tubal patency test
- Tubal ligation
- Safe clip placement on uterine vessels
- Lysis of pelvic adhesions
- Management of an ectopic pregnancy
- Key hysterectomy tasks, including ligament dissection, treatment of the adnexa, and vesicouterine fold dissection

Essential Skills

- Camera handling, including image centering, horizon control, and periscoping
- Bi-manual skills training, including instrument triangulation, grasping, cutting and clip application

LaparoS[™] modules are compatible with GynoS[™], UroS[™] and ArthroS[™] for multidisciplinary training on one platform.

VirtaMed[®]

Positioning is crucial for better outcomes¹



Patient positioning

LaparoS[™] is the first simulator where a trainee learns how to position the patient according to the procedure requirements.



Trocar placement Freely place trocars across the abdominal model, demonstrating instrument handling with different trocar placement.



Team setup

LaparoS[™] allows the surgeon and assistant(s) to practice the real OR team setup, including learning how to collaborate in limited space.



¹Agostini J, Goasguen N, Mosnier H. "Patient positioning in laparoscopic surgery: Tricks and tips,", Journal of Visceral Surgery (2010) vol. 147, no. 4, p. 287-291.