Laparoscopic Camera Trainer

Technology #20150048

Laparoscopic Camera Skills Training

An inexpensive laparoscopic camera handling trainer (CHT) provides effective training for 30° laparoscopic camera navigation. The device consists of a transparent Plexiglas viewfinder, trocar support and a graphical path for users to navigate. The viewfinder is connected to a monitor that displays images from the camera and features a geometric shape indicating correct targeting of the camera lens on the graphic path. A specially designed trocar support provides passive feedback, similar to that offered by human skin, and can be used with 3mm, 5mm, 10mm and 12mm trocar sizes. A series of sequentially numbered targets interspersed with obstacles provides trainees with a path along which to navigate the camera.

Mimics Laparoscopic Situations

The CHT differs from existing technologies in a number of ways. Its clinically-oriented design forces the trainee to execute optics movements similar to those commonly used in clinical practice, and the dedicated trocar support provides passive feedback. The graphical targets of the CHT are printed on flat surfaces in a shape that aligns geometrically with the optics during the exercise. Furthermore, the materials and design boast lower production costs, and the CHT is easily portable.

BENEFITS AND FEATURES OF LAPAROSCOPIC CAMERA HANDLING TRAINER (CHT):

- Provides effective navigation training
- Graphical pathway with obstacles challenges trainees
- Dedicated trocar support provides passive feedback

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Phase of Development: Prototype

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