surgicalscience

Simball Box®

Objective Feedback With Real Instruments

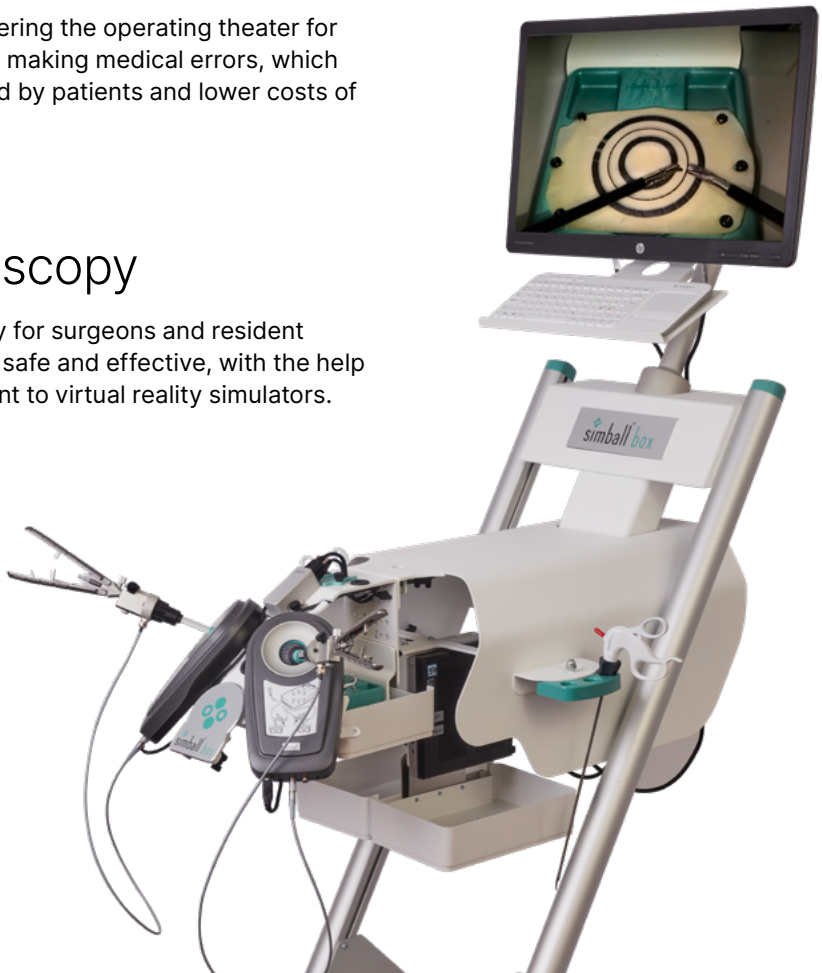
Simball Box is equipped with a high definition camera and advanced instrument-tracking that provide important feedback. The data, which are visualized in convenient diagrams, show the economy of movement with a focus on the distance covered by the instruments, making it easy to objectively assess the residents level of proficiency.

Patient Safety First

Mastering the basic skills of laparoscopy, before entering the operating theater for the first time, reduces the risk of resident physicians making medical errors, which in turn translate to fewer adverse events experienced by patients and lower costs of medical care.

Safe And Effective Laparoscopy

Simball Box is a platform that offers a structured way for surgeons and resident physicians to learn laparoscopic techniques that are safe and effective, with the help of tutorial task videos, making it a natural complement to virtual reality simulators.



Simball Box offers surgeons and resident physicians the opportunity to train with their preferred OR instruments and get a sense of the counter-intuitive movements, limited space awareness and reduced tactile feedback that constitute some of the characteristics of laparoscopy.

Key Features:

- Real instruments that are easy to connect.
- High-class models for suturing and grasper training.
- Economy of movement with instrument tracking.
- Data visualized in convenient diagrams.
- Easy to plot learning curves and benchmark performance.
- Benchmarking in relation to expert level performance.
- Real-time visual feedback.
- Structured learning with video tutorials and intuitive user interface.
- Objective assessment and certification.
- Robust and user-friendly.

Available Exercises For Simball Box

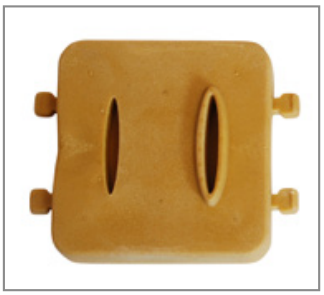
Basic Skills Tasks

Rope race

Peg picker

Precision cutting

Suturing Tasks



Basal suturing

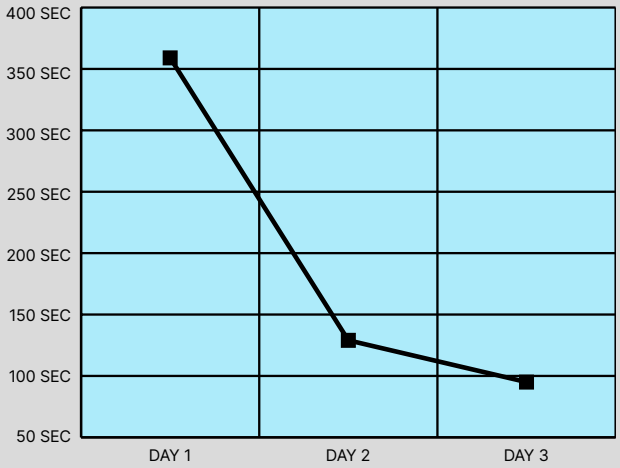
Gastric bypass, GE and EA

Vaginal cuff closure

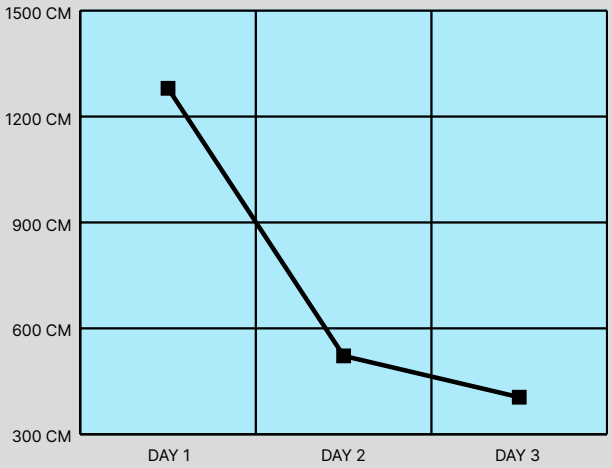
Models with a True Tissue Sense for Suturing and Grasper Training

Clinical Study: Simball Box A Promising Tool

Residents attending a 3-day laparoscopy course were evaluated performing a laparoscopic surgical knot at the start, middle and end of the course. Feedback data were presented in reference to expert/tutorial performance.



Median time to finish the task decreased from 359 to 129 to 95 seconds, corresponding to 655 %, 236 %, and 174 % of tutorial performance.



Combined median total instrument motion decreased from 1208 to 522 to 405 cm, corresponding to 673 %, 291 %, and 22 5 % of tutorial performance.

"Simball Box for Laparoscopic Training With Advanced 4D Motion Analysis of Skills. KRISTINE HAGELSTEEN, DAN SEVONIUS, ANDERS BERGENFELZ, MIKAEL EKELUND Surgical Innovation Vol. 23, Issue 3, pp. 309 – 316, 2016

"We find Simball® Box an exciting new training tool with potential to make surgeon training more effective and measurable. With these objective measurements we can better evaluate the performance of the students. We intend to use Simball® Box in future courses".

Ann Kjellin
Consultant Surgeon & Director
CAMST Training Centre at Karolinska,
Stockholm, Sweden

"This is very attractive and realistic training for both young as well as senior surgeons. There is a urgent need to enhance surgical training level."

Gunnar Henriksson
Consultant Surgeon at Skövde
Hospital, Sweden

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Would you like to hear more about how your organization can benefit from simulation?
Please get in touch, we'd love to hear from you.
Request a demo at **info@surgicalscience.com**

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