

# Wii-playing surgeons may improve performance on laparoscopic procedures

February 27 2013

---

Laparoscopic surgeons may improve certain aspects of surgical performance by regularly playing on a Nintendo Wii, according to research published February 27 in the open access journal *PLOS ONE* by Gregorio Patrizi and colleagues from the University of Rome, Italy.

Considering the technical skills required to perform laparoscopic procedures, several studies aim to evaluate and improve training for surgeons outside the operating room. Previous studies have assessed the effect of [playing video games](#) on hand-eye coordination and spatial attention. In the current research, the authors combined these two aspects by analyzing how a four-week training regimen on the Nintendo® Wii impacted the laparoscopic skills of post-graduate residents in the first or second year of their surgical training. Half the surgeons were assigned to a training regimen on the Wii while the other half were not. Before and after the regimen, all the participants' performance was tested on a laparoscopic simulator.

The study found that participants in both groups improved their skills over the four week period, but those who had been trained on the Wii showed a significant improvement over the other group in their performance on several specific metrics like economy of instrument movements and efficient cautery. The study concludes, "The Nintendo® Wii might be helpful, inexpensive and entertaining part of the training of young laparoscopists, in addition to a standard surgical education based on simulators and the operating room."

**More information:** Giannotti D, Patrizi G, Di Rocco G, Vestri AR, Semproni CP, et al. (2013) Play to Become a Surgeon: Impact of Nintendo Wii Training on Laparoscopic Skills. PLoS ONE 8(2): e57372. [doi:10.1371/journal.pone.0057372](https://doi.org/10.1371/journal.pone.0057372)

Provided by Public Library of Science

Citation: Wii-playing surgeons may improve performance on laparoscopic procedures (2013, February 27) retrieved 27 April 2024 from <https://medicalxpress.com/news/2013-02-wii-playing-surgeons-laparoscopic-procedures.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.