Wii and iPad as endoscopic surgical trainers

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Objective: We present surgical experience with endoscopic trainers with smart phones, tablets and Wii game at the Faculty of Medicine at the Universidad Panamericana, Mexico City.

Methodology: Two specific holders were designed and built to hold real laparoscopic tools.

Results: 300 undergraduate students have used serious game trainers since 2010 and they performed the followings 4 surgical procedures: Laparoscopy, nephrectomy, splenectomy and appendectomy on animal model.

Conclusions: Students developed hand-eye coordination and time reduced to make knots and sutures. We suggest serious game as complementary and useful tool for teaching introduction and for warm up for endoscopic surgery in the career of medicine for undergraduate students. Our program of surgery included endoscopic surgery in the second and fourth year of the career and conventional endoscopic tools were used as complement at the end of each course of one month.

Biography
Jose Luis Mosso Vazquez researcher at the Universidad Panamericana and Clinical-surgical practitioner in Public Health Institutions in Mexico City. He developed the first robot (Tonatiuh) to hold laparoscope as assistance in Endoscopic surgery in Mexico in 1996. He introduce Cybertherapy in 15 differents areas in Medicine with highlights in ambulatory surgery reducing pain and anxiety considerably. The recent contribution is using tablets and smartphones as Surgical simulators for endoscopic surgery training in 304 undergraduate students since 2010 until today. At the Universidad Panamericana. He perform Emergency Surgeries at the Regional Hospital number 25 of the IMSS (Instituto Mexicano del Seguro Social) since 2000 until today, performing surgical repairs on neck, thoracic, gastrointestinal and pelvic regions. He serves as Gastrointestinal Endoscopist since 1997 until today at the ISSSTE (Instituto de Seguridad y Servicios Sociales para los Trabajadores del Estado).

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