Use Of Simulation To Improve Ultrasound Guided Arterial And Venous Access Of Difficult Vessels

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Disclosure

- Member of the Board of Trustees, Vascular International Foundation and School
- Stock Holder, Vascular International

Ultrasound guided Vascular Access

- Marquis-Gravel G. et al. 2018: Randomized evaluation and metaanalysis
- Arterial: Significantly less inadequate access, bleeding and punctures
- Brass P. et al. 2015: Cochrane Database Review
- Venous: less inadequate access, bleeding and punctures

Simulator-Training

- Larsen C R 2009: Effect of virtual reality training on laparoscopic surgery: randomised controlled trial
- Ahlberg G et al 2007: Proficiency-based virtual reality training significantly reduces the error rate for residents during their first 10 laparoscopic cholecystectomies
- Kim AH. et al. 2015: Simulator-Training for EVAR
Conclusion

- Our newly developed flow simulator is an excellent tool for ultrasound guided vascular access training.

- Future studies will demonstrate increase of patient safety by transferring learning curves from patients to simulators.

Thank you!