Th.OS-1.1 ImPACT Tohoku

9:00 – 10:00 (第1会場／Room 1)

Th.OS-1.1-4
Development of endovascular treatment environment for medical training and simulation using coiling

Yasutomo Shimizu (Tohoku University)  Simon Tupin (Tohoku University)  Kaihong Yu (Tohoku University)  Soyoka Osaki (Tohoku University)  Hiroshi Yoshida (Tohoku University)  Masaaki Shojima (the University of Tokyo)  Tadao Matsunaga (Tohoku University)  Yoichi Haga (Tohoku University)  Makoto Ohta (Tohoku University)

Intravascular treatment is recognized as one of the most difficult skills to acquire for medical doctors and realistic in vitro training systems for endovascular treatment are increasingly demanded these days. Vessel model is a major part to construct the system with strong requirements of the reproducibility of both mechanical properties and haptic sense during catheter operation. In this study, the condition to fabricate realistic models and the training system imitating the environment of intravascular treatment were established and 4-coil occlusion in the aneurysmal model was performed by a skilled medical doctor. The coils are successfully inserted into the aneurysm and the doctor evaluates haptic sense during the operation is similar to realistic situations. The experimental result and the doctor’s evaluation indicate the new developed system is beneficial to the training of intravascular treatment.