Th.OS-1.1 ImPACT Tohoku

9:00 – 10:00 (第1会場／Room 1)

Th.OS-1.1-1
Blood vessel model equipped with ultrasound sensors for evaluation of intravascular treatment

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Intravascular surgery, such as coil embolization and stent placement, has been widely performed for treatment of cerebral aneurysms. Doctors must be skillful and sufficiently experienced to successfully manipulate and insert a guidewire and a catheter into the aneurysm via carotid and cerebral artery. Though blood vessel model is useful for training of the doctors in the field of the intravascular surgery, evaluation of doctor’s skill and efficacy of training is insufficient. In this study, an ultrasound sensor was fabricated and equipped in the cerebral blood vessel model to measure the displacement of the vessel wall that is contacted and pushed by a guidewire or a catheter. It is confirmed that the fabricated ultrasound sensor could measure the displacement of blood vessel wall by the inserted catheter.