An Analysis on Evaluation structures of Blood Vessel Model by Medical Doctor Using Evaluation Grid Method

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Recently, with the increased popularity of endovascular therapy, blood vessel model become more important owing to its practicality in skill training and new device evaluation. To develop the appropriate model, it’s necessary to understand how doctors evaluate the model. In this research, a doctor in NeuroEndovascular therapy was interviewed to analyze his evaluation structure of blood vessel. During the test, the doctor was asked to evaluate three different blood vessel models made based on a same realistic geometry of cerebral artery by using catheter. A sensory test methodology called evaluation grid method was used to analyze the evaluation structure of the doctor. Our results suggest that, the evaluation of a blood vessel model by a doctor is made based on the sensation given by the model through the catheter, including the friction of the inner wall, the similarity of the shape, and the confidence obtained by using the model.