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C0123 - SEVEN ANEURYSMS: EXPERIMENTAL TRAINING MODELS FOR ANEURYSM CREATION

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Resumen

Objectives: Experimental training on neurovascular models is the best tool for safety vascular microsurgical procedures performing. One of the most accepted and extensively studied animal model in neurosurgery are rodents. We trained on complex microvascular experimental models for the development of different types of aneurysms that we created mimicking the most common ones we find in real humans. Our proposal is to show the feasibility of aneurysms creation.

Methods: The procedures were performed under a Zeiss (OPMI pico f170) microscope by using a microsurgical basic kit, 10/0 Nylon and blue Polypropylene sutures. We used adult albino Wistar rats weighing between 258 and 471g each. 7 different aneurysms types were created using carotid, jugular, cava, aorta and femoral vessels.

Results: It is possible to create the aneurysms we designed previously and they work. There are differences in the realism we achieved and the difficulty of performance according to the different types. We describe the steps and technical issues to make these exercises.

Conclusions: The present paper shows the feasibility of aneurysms creation by using different vessels in rodent and can provide guidance on these exercises. Furthermore, training on these models could help to improve the microsurgical skills due to dissection, manipulation and suturing of tiny vessels. In future papers (Part 2) we will show the surgical treatment for our 7 aneurysms.