

**Introduction:** the relatively high incidence of aneurysmal rupture which reported to be 9.2% (in some reports it reached 40%), the lack of exposure of residents to such complication necessitates the adaptation of several teaching models for practicing the management of such complication, among them but not limited to are the wide range of computer simulation, but none of the available training models combines the real human anatomy along with the life-like situation during surgery to provide the perfect identical scenarios of the real intra-operative environment. Here we are presenting a new technique using the live cadaver model for surgical training.

(Fig 1)

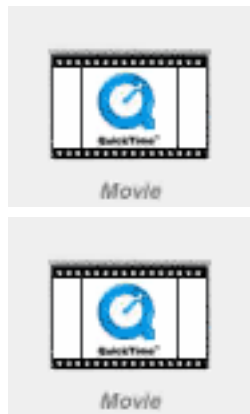


**Methods:** Artificial aneurysms were modeled and placed in the anterior circulation (MCA, ICA bifurcation, PcomA, and in the paraclinoid region) on cadaver heads especially prepared according to the Live Cadaver (Perfused Cadaver) protocol: the vessels in a cadaveric head are filled with colored fluid under pulsating pressure for arteries and static pressure for veins, the Carotid and/or vertebral arteries are cannulated and connected to red liquid reservoir that connected to a pump. The jugular vein is connected to a dark red liquid reservoir. (Fig 1, Video 1) . aneurysms forced to bleed while dissection in a similar fashion of what might happened during surgery (video 2,3), 40 residents practiced how to deal with aneurysmal rupture, and how to clip aneurysms in many different options., (Video 1):



**Results:** The vast majority of the residents performed the clipping procedure correctly. Even less experienced residents who never did it before, but their microsurgical skills was not at the level needed, after the training session residents felt more confident clipping an aneurysm, and realize how important is to practice microsurgical skills in the labs using simulation.

(Video 2, 3, 4)



**Conclusion:** The Live Cadaver is a unique and efficient training and simulation model for the management of intra-operative vascular injuries and aneurysmal (intra-operative) rupture. United States Patent number: 6790043

**Learning Objectives:** Participants will learn a new technique for practicing the management of Intra operative aneurysmal rupture (Video 4)

