

## A SIMPLE PERFUSED CADAVER MODEL FOR DAMAGE CONTROL VASCULAR SURGERY TRAINING

Dr. Rifahi and colleagues have described an elegant training model for endovascular surgery using pulsatile arteriovenous perfusion of a cadaver.<sup>1</sup> We reported use of a simple perfused cadaver model to test a novel system for resuscitative endovascular balloon occlusion of the aorta (REBOA).<sup>2</sup> Our method is possible in most anatomy laboratories or hospital morgues using commonly available equipment. Red-dyed water was instilled via the carotid artery into the aorta of a fresh or thawed cadaver using the laboratory's pump, which is normally used to instill preservative. We tested occlusion of the aorta by observing the escape of fluid from the contralateral femoral artery, which had been opened.

We have also adapted this simple model to teach the principles of damage-control vascular surgery. Procedures that can be taught with a high degree of fidelity using this simple model include resuscitative thoracotomy, aortic clamp placement above the celiac artery or below the renal arteries, control of intra-abdominal hemorrhage, ligation of pelvic arteries, shunting of limb vessels and placement of REBOA. Our nonpulsatile simplified model also had the advantage of simulating hemorrhage in a shocked patient.

Dr. Rifahi's superior model and our simple method both emphasize a partnership with anatomy that is as old as surgery itself but is threatened in modern times.

**Shane A. Smith, MD;**

**Vivian C. McAlister, MB**

**Affiliations:** From Western University, London, Ont.

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**Correspondence to:** S.A. Smith; [shaneasmith3@gmail.com](mailto:shaneasmith3@gmail.com)

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## References

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