An intermediate step, non-living model (ox tongue) for microvascular training

Academic authors: Daniel Imbassahy de Sá Bittencourt Câmara e Silva, Fauze Camargo Maluf Academic advisors: Cristina Pires Camargo, Julio Morais Besteiro, Rolf Gemperli

Background: This study aimed to introduce a nonliving microvascular training model based on vessels diameter and feasibility.

Methods: We dissected ten oxen tongues, and divided the pedicles into three-thirds: proximal, medial and distal. We measured the external vessels diameter in all regions. We performed a descriptive statistical analysis.

Results: We dissected all oxen tongues, each tongue showed two parallel pedicles. Each pedicle was located at 1.5 - 2.0cm from the midline. Proximal median artery and vein diameter were 3.9 ± 0.7 , and 5.04 ± 1.44 mm, respectively. In the medial third, the mean artery diameter was 3.3 ± 0.4 mm, and the vein diameter was 3.5 ± 0.9 mm. The distal third showed a mean artery diameter of 2.0 ± 0.42 mm, and a vein diameter of 2.4 ± 0.82 mm.

Conclusion: This study suggested a feasible non animal model for microsurgical training process for beginners and intermediate trainees.

Keywords: Microsurgery; Surgical anastomosis; Ethical; Medical education.