Using the University of Pennsylvania Flap Course Experience as an Assessment of the Current State of Microsurgical Education and Practice: A Survey Study

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BACKGROUND

- The University of Pennsylvania Flap Course (PFC), inaugurated in 2017, is an annual 3-day dissection intensive led by international microsurgeons.
- The objectives of this study are to abstract information regarding the backgrounds of instructors and trainees alike, as well as the effectiveness of the course.

METHODS

- 2019 PFC participants were invited to complete an anonymous survey.
- One survey was administered to faculty and the second to course learners.
- Both surveys consisted of baseline demographic information, training background, experiences in practice and/or training, and course feedback for quality assessment.

RESULTS

- Overall, 77.3% (17/22) of faculty responded to the survey.
- Most practiced in the United States (88.2%) and were primarily trained in plastic and reconstructive surgery (82.3%). Other academic practices included orthopedic surgery (29.4%), hand surgery (35.3%) and microsurgery (47.1%).
- Upper- and lower-extremity were common in active practice (76.5%, 82.3%), with head and neck (H&N) being least (47.1%).
- Faculty microsurgical training background was associated with increased free flaps per week (7 vs. 2.3) and per year (94.2 vs. 27.8) (p < 0.05 for both), with a trend of more H&N (p=0.057).
- Overall, 73.0% (35/48) of learners completed the survey.
- Most were male (71.4%), from the United States (68.6%), and currently in training in plastic and reconstructive surgery (77.1%).
- Most report comfort with arterial/venous anastomosis (77.1%, 71.1%), but least comfortable with H&N (mean comfort: 5.2/10).
- Microsurgical dissection skills (97.1%), and microsurgical armamentarium (94.3%) across anatomical domains improved (TABLE).

CONCLUSION

- PFC is an effective program in increasing both knowledge/technical skill across anatomic domains.
- PFC trainees are least comfortable with H&N microsurgical principles and anatomy.
- Faculty microsurgery training background associated with greater flap volumes and trend of more H&N reconstruction.