Trainee Selection and the Correlation between Cognitive and Technical Skill Evaluation

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INTRODUCTION: The selection process for surgical trainees aims to identify those who will perform best during training and have the greatest potential as future surgeons. Better understanding the predictive relationship between interview performance, level of technical skill, and performance during training will allow optimization of the interview and evaluation process to identify the best candidates.1–3

MATERIALS AND METHODS: Three annual cohorts of Reconstructive Microsurgery fellows at the Department of Plastic Surgery at the University of Texas MD Anderson Cancer Center, comprising 20 trainees, were included in the study. At interview, subjects were rated using seven criteria, as well as given a score for overall impression. At the start and end of the fellowship, microsurgical technical skill was assessed both in the OR and laboratory using a validated tool. At the end of the fellowship there was a final evaluation of performance using criteria adapted from the six Accreditation Council for Graduate Medical Education (ACGME) core competencies. Scores at interview, technical skill assessment, and final evaluation scores were all compared in multiple ways to determine associations and predictive factors.

RESULTS: Microsurgical skill assessment in the OR at the start of training correlated with all domains evaluated at interview, most closely with Plastic Surgery Training Experience. Microsurgical skill assessment in the OR at the end of training also correlated with scores on the majority of final assessment criteria based on ACGME core competencies, with the highest correlations with Patient Care and Medical Knowledge. Assessment of microsurgical skill in the laboratory at the start of the fellowship did not improve the predictive relationship between interview scores and ACGME core competency evaluations.

CONCLUSION: Microsurgical technical skill in the OR tracked with all domains evaluated at interview, and also with the majority of ACGME core competency evaluations. These results validate the use of the current selection process in choosing candidates with the highest level of both cognitive and technical skill, and also support the effectiveness of the one-year microsurgical fellowship at improving microsurgical skill in all trainees.

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A New Modified Closed-Open Approach as Part of a Graduated and Integrative Approach to Rhinoplasty

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BACKGROUND: Open versus closed approach in rhinoplasty is a frequently debated topic in aesthetic plastic surgery.1–3 Although good results can often be achieved with either technique, both have unique advantages and disadvantages. We present a new modified closed-open approach employed in selected cases that encompasses features of both.

METHODS: The surgical approach is described in detail followed by clinical examples. Indications and limitations are discussed. The procedure begins as a closed approach through an intracartilaginous incision allowing cephalic trimming of the lateral crura and dorsal rasping and/or excision. Patients requiring extensive nasal tip maneuvers are dealt with exposure of the alar cartilage framework through a transcolumellar/limited marginal incision to provide adequate exposure of the alar cartilages as well as easy access to the septum. In our hands this approach is easy and expedient. It requires less tip dissection, and therefore avoids the prolonged postoperative edema associated with open or extended closed tip delivery approaches.

CONCLUSION: The modified closed-open technique circumvents the limitations of the closed approach by providing good exposure of the tip and septum without incurring
the shortcomings of the open approach. In selected cases, it provides the surgeon with the opportunity to combine the advantages of both techniques.

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### The Neighboring Flap Theory: A New Idea for Defect Closure Achieving Both Reducing the Defect and Confirmed Primary Donor Closure

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**INTRODUCTION:** Covering a large defect with minimal donor site morbidity is a challenging task in reconstructive surgery. Recent advances in perforator flaps provides further alternatives. The research for angiosome or perforasome distinguishes the maximum size of each flap. The maximum size with direct donor site closure is determined by its position and has individual variation. The size of flap is, of course, measured from the size of the defect. The flap size tends to be slightly larger than the defect to avoid tension on the flap after suture.

**MATERIALS AND METHODS:** Our new idea, flap elevation from adjacent area, enables making the defect smaller and simple in calculating the largest size of flaps. Preoperatively the perforators for flap around the defect should be detected. The pedicle of the flap should be inside the defect. The ligation test is done on the edge of the defect in the direction of the pedicle, and the maximum distance of these ligation points is the flap breadth. The length is decided as needed.

**RESULTS:** From April 2012 to February 2016, 8 malignant tumor excision cases were treated with this method. Among them, 3 cases were anterolateral thigh flaps (ALT) or tensor fasciae latae musculocutaneous flap for inguinal to lateral buttocks. 3 cases were anterior chest wall reconstructions by vertical rectus abdominis musculocutaneous (VRAM) flaps or thoracoacromial perforator flap. 2 cases were latissimus dorsi musculocutaneous flaps (LD) for back. In one of VRAM cases, the 35x15cm size skin paddle was divided into 2 pieces to cover 25x21cm defect. None of the flaps failed. All the donor sites were closed directly.

**CONCLUSION:** There are many studies about reduction in the donor site morbidity. Especially for large flaps, reducing the width by dividing the skin paddle or combined flap enables direct closure of the donor sites. To reduce the defect, partial direct closure is useful, but results in big dog ear. Our method enables two advantages by taking the flap from the neighboring area intentionally, because the dog ear is used as flap. If the breadth is less than the defect size, dividing the flap into some pieces is useful especially for LD, VRAM, and ALT.

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### Alar Pinning with Rigid External Distraction for Treatment of Midfacial Hypoplasia

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Distraction osteogenesis with a rigid external distractor is a widely accepted treatment of midfacial hypoplasia. In this