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The use of simulation with non-living model to enhance medical students' learning in a surgical training course

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APPENDICES

Appendix A

CUTANEOUS FLAP QUIZ

1. Cutaneous flaps are routinely used in plastic surgery. Considering the transfer method, choose the alternative that englobes flap transfer classification:
 - a) free flap, island flap, transposition
 - b) rotation, advancement, interpolation
 - c) transposition, w-flap, island flap
 - d) V-Y, advancement, rotation

Correct answer- b

Starkman SJ, Williams CT, Sherris DA. Flap Basics I: Rotation and Transposition Flaps. *Facial Plast Surg Clin North Am.* 2017;25(3):313-321. doi:10.1016/j.fsc.2017.03.004

2. Considering the bilobed flap. All the alternatives are correct except:
 - a) it is a rotation and transposition flap
 - b) it is used to minimize tension area
 - c) it is indicated for lesion > 3cm
 - d) it was originally described to reconstruct nasal defects

Correct answer c- bilobed flap was designed to reconstruct small lesions (1.5 to 2cm)

Starkman SJ, Williams CT, Sherris DA. Flap Basics I: Rotation and Transposition Flaps. Facial Plast Surg Clin North Am. 2017;25(3):313-321. doi:10.1016/j.fsc.2017.03.004

3. Interpolated flaps are designed to:

- a) paramedian forehead, melolabial flap are examples of interpolated flaps
- b) to reconstruct skin defects with continuous donor tissue
- c) requires a second surgery to pedicle division around 3-4 weeks
- d) interpolated flap offers an excellent skin color match

Correct answer- b interpolated flaps are designed to reconstruct defects with a skin bridge between the donor and recipient site

Reckley LK, Peck JJ, Rooft SB. Flap Basics III: Interpolated Flaps. Facial Plast Surg Clin North Am. 2017;25(3):337-346. doi:10.1016/j.fsc.2017.03.006

4. Flap elevation will decrease blood flow. To minimize this effect there are several delay strategies.

Choose the best surgical delay alternative

- a) vasodilator injection before the surgery
- b) bipedicle flap, elevating only a portion of a planned single pedicle flap
- c) flap elevation and no suture
- d) negative pressure dressing over the flap

Correct answer - b

Lucas JB. The Physiology and Biomechanics of Skin Flaps. Facial Plastic Surgery Clinics of North America. 2017 Aug;25(3):303-311. DOI: 10.1016/j.fsc.2017.03.003.

5. Borrow-s triangle can be done in the following situations

- a) to improve the incision quality
- b) in a rotation flap to minimize tension
- c) advancement flap
- d) A and C are correct
- e) B and C are correct

Correct answer- e

Shew M, Kriet JD, Humphrey CD. Flap Basics II: Advancement Flaps. Facial Plast Surg Clin North Am. 2017;25(3):323-335. doi:10.1016/j.fsc.2017.03.005

Krishnan R, Garman M, Nunez-Gussman J, Orenge I. Advancement flaps: a basic theme with many variations. Dermatol Surg. 2005;31(8 Pt 2):986-994. doi:10.1111/j.1524-4725.2005.31823

6. Cite two examples of skin flap based on blood supply
random-
axial-

Krishnan R, Garman M, Nunez-Gussman J, Orengo I. Advancement flaps: a basic theme with many variations. *Dermatol Surg*. 2005;31(8 Pt 2):986-994. doi:10.1111/j.1524-4725.2005.31823

7. Skin flap planning demands the following factors

- a) vector of tension wound
- b) anatomical subunits
- c) relaxed skin tension lines
- d) All the above
- e) B and C

Correct answer- d

Shew M, Kriet JD, Humphrey CD. Flap Basics II: Advancement Flaps. *Facial Plast Surg Clin North Am*. 2017;25(3):323-335. doi:10.1016/j.fsc.2017.03.005

8. The “Plastic reconstruction ladder” is characterized by the following order

- a) primary suture, partial thickness skin graft, total skin graft, local flaps
- b) primary suture, second intention, skin graft, tissue expansion
- c) second intention, skin graft, local flap, free flap
- d) primary suture, second intention closure, skin graft, local flap, distant flaps, free flaps
- e) second intention, skin graft, local flap, free flaps

Correct answer- d

Janis JE, Kwon RK, Attinger CE. The new reconstructive ladder: modifications to the traditional model. *Plast Reconstr Surg*. 2011;127 Suppl 1:205S-212S. doi:10.1097/PRS.0b013e318201271c

Hallock GG, Morris SF. Skin grafts and local flaps. *Plast Reconstr Surg*. 2011;127(1):5e-22e. doi:10.1097/PRS.0b013e3181fad46c

9. Connect the most appropriate skin flap to the facial unit

- a- bilobed flap
- b paramedian forehead flap
- c- advancement flap

I - nasal tip

II - lateral nasal structure

III- malar facial subunit

Correct answer a-II, b - I, c -III

10. Rhomboid flap requires

- a) short axis- secondary axis with 60°
- b) Limberg design
- c) Two-axis with 60° pivotal angle
- d) A and B are correct
- e) B and C are correct

Correct answer - c

Starkman SJ, Williams CT, Sherris DA. Flap Basics I: Rotation and Transposition Flaps. Facial Plast Surg Clin North Am. 2017;25(3):313-321. doi:10.1016/j.fsc.2017.03.004