

One-stage Nasal Reconstruction With Full-thickness Composite Posterior Auricular Artery Perforator Free Flap

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Disclosure

- Nothing to disclose.

Background

- Large full thickness defects of the nasal region including zones II and III
 - Diverse methods are introduced
 - Stepwise operations are required
- Can not be used when the patients can not be followed up
 - e.g. foreigner

Purpose

- To report a one-stage reconstruction method for nasal composite tissue defects using **full-thickness composite posterior auricular artery perforator free flaps.**

Presentation of the case

- M/25
- Nasal composite tissue defect due to human bite
- No amputee
- Foreigner – scheduled to leave three months later

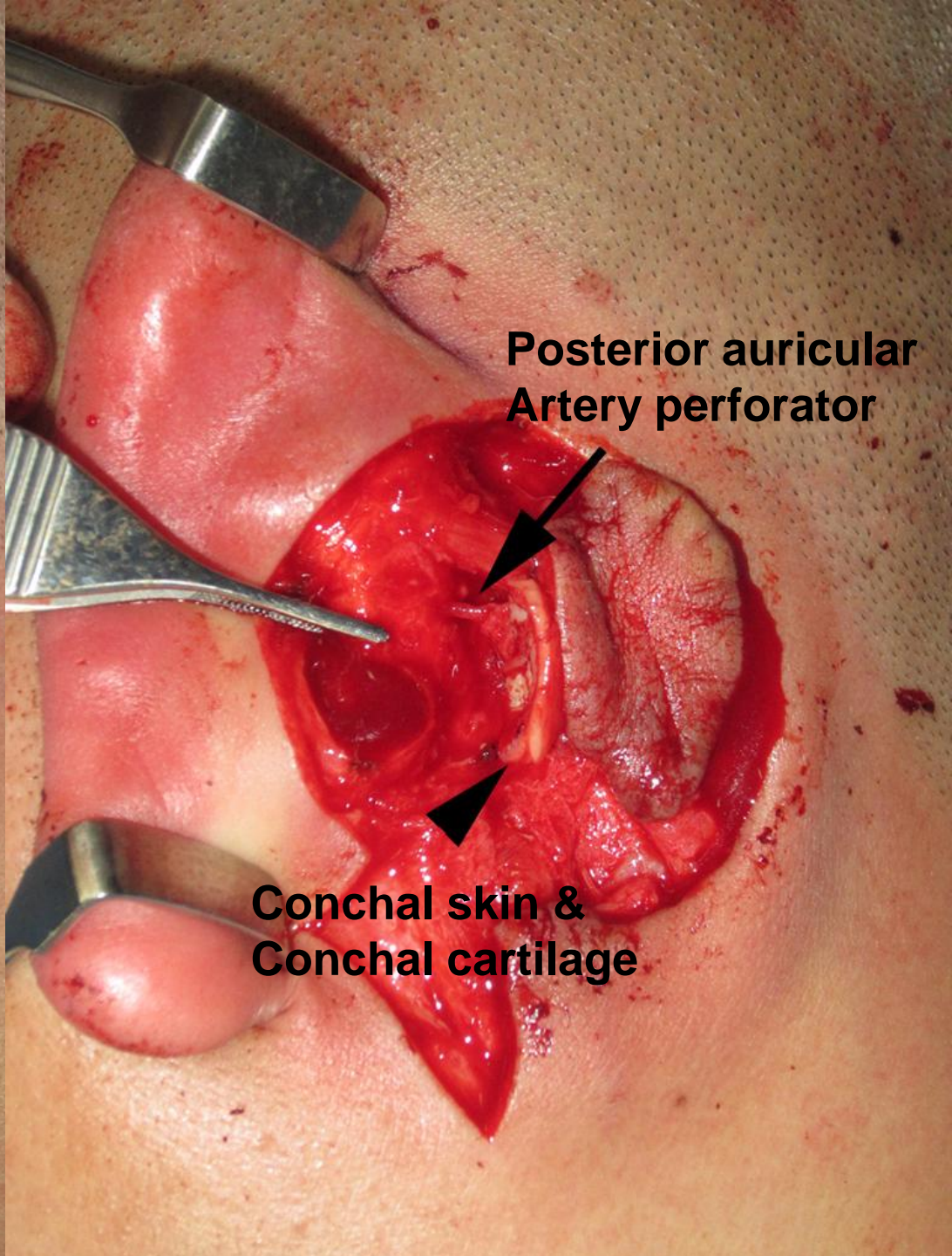


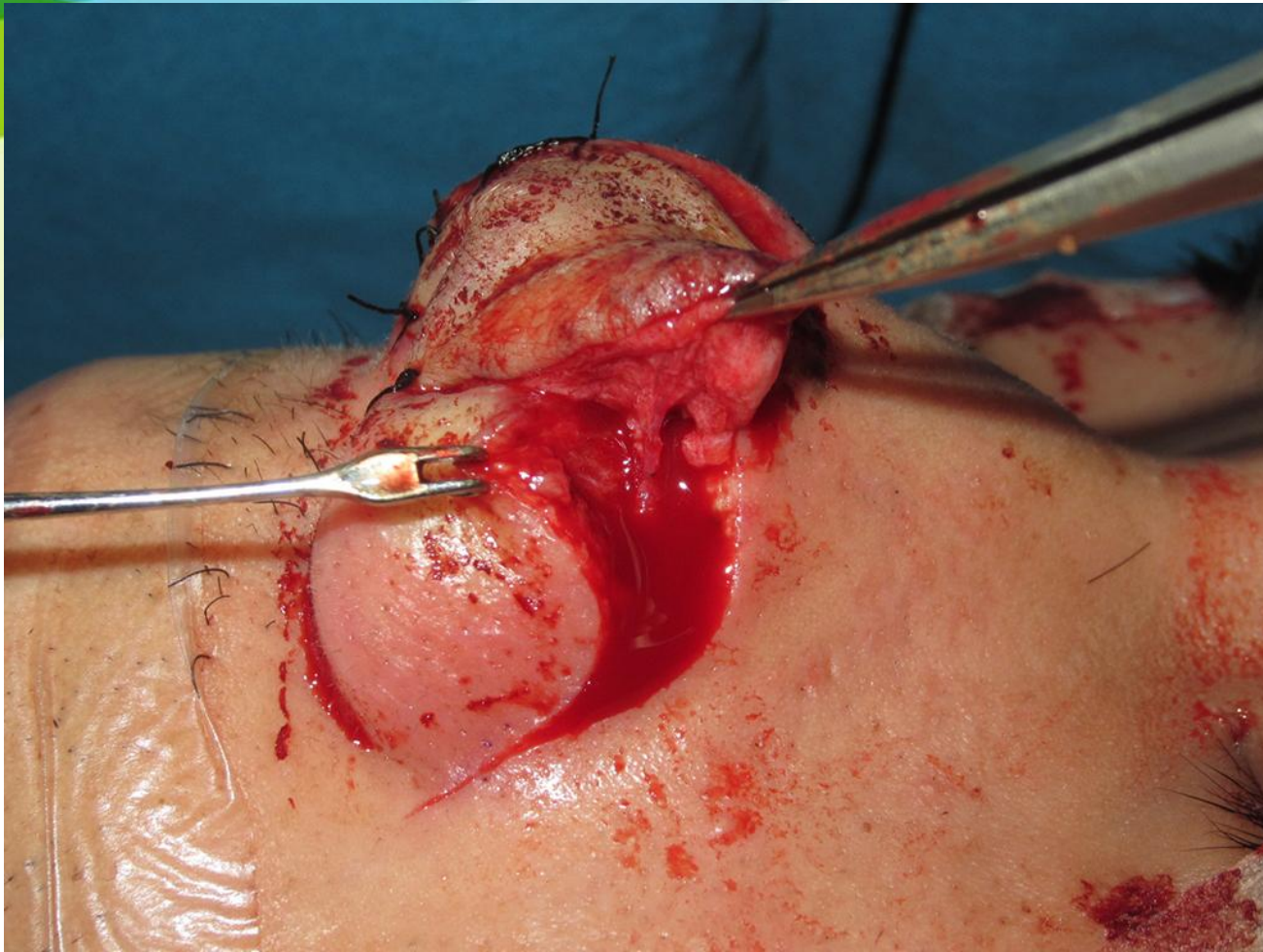
Operative planning

- Wedge shape full-thickness defect
 - External skin: 2.5 x 2.5cm
 - Nasal lining: 0.5 x 1cm
- One-stage reconstruction
 - Should be treated within three months

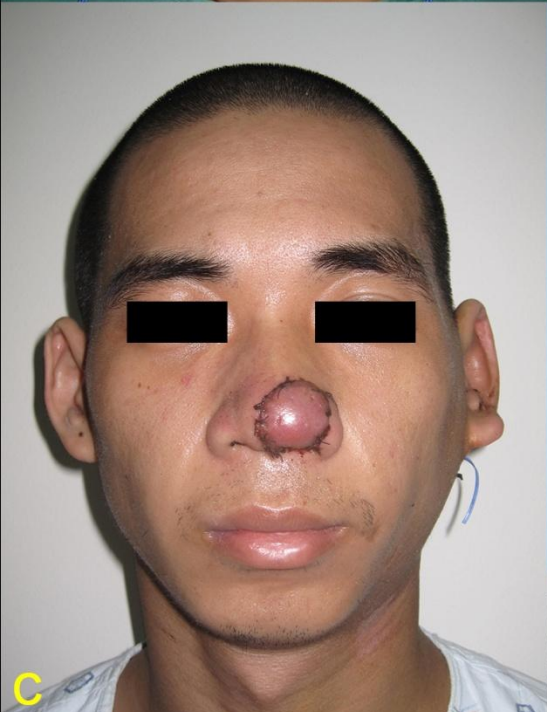
Operative planning

- Posterior auricular artery perforator free flap
 - Full thickness through and through harvest **(No report up to date)**
 - Conchal skin → Nasal lining
 - Conchal cartilage → Alar cartilage
 - Posterior auricular skin → External nasal skin

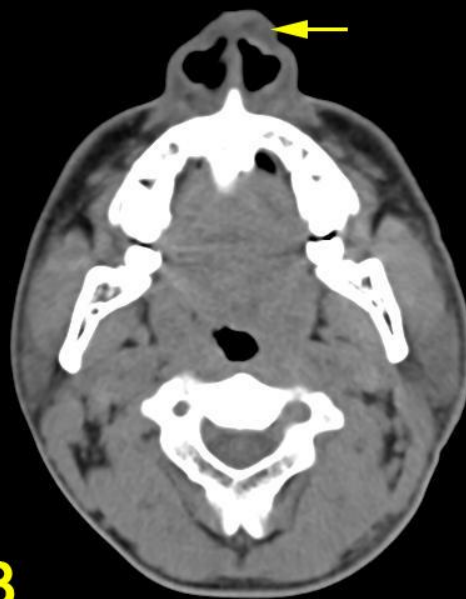




- Anastomosis with lateral nasal artery
- No venous anastomosis → systemic heparinization for a salvation of the flap



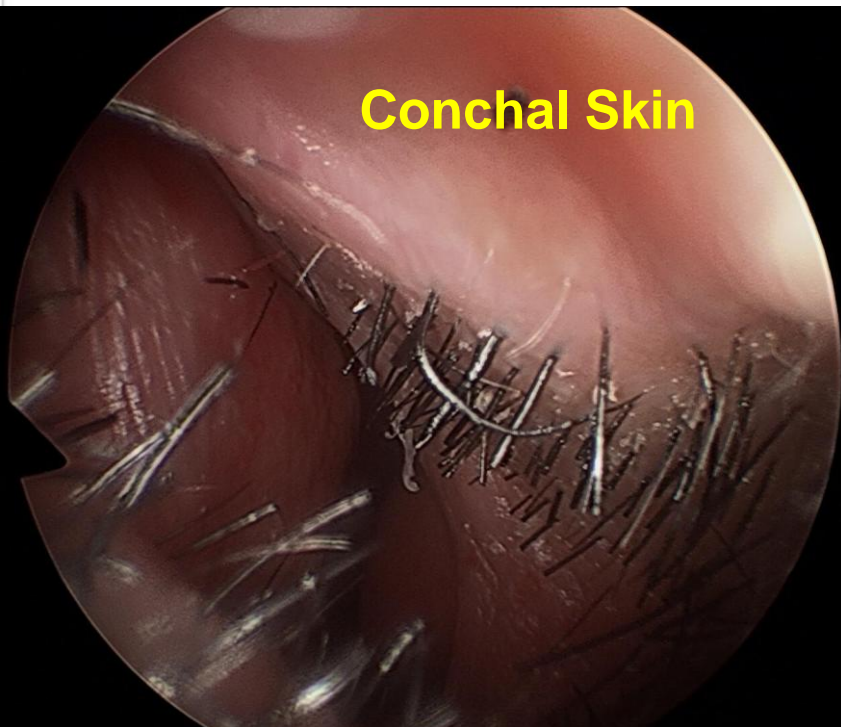
- A: Preoperative view
- B: Postoperative 7-day view
- C: Postoperative 3-week view
- D: Postoperative 10-month view



A

B

C



- A: Preoperative CT
- B: Postoperative 3-week CT
- C: Postoperative 10-month CT
- ◀ Endoscopic view of nasal lining (POD#3weeks)
 - Good survival of conchal skin

Postoperative course

- Donor: closed primarily
 - Minor difference in the auriculocephalic angle
 - Slight narrowing of the intertragic notch
- CT follow-up
 - Well maintained conchal cartilage
- Silicone sheeting for contouring
 - Started six weeks after surgery

Conclusion

- Full-thickness posterior auricular artery perforator free flap can be used in one-stage reconstruction of nasal composite defect with satisfactory results
 - Full-thickness tissues of the ear can be survived by posterior auricular artery perforator alone
- Considered to be another good option for one-stage nasal reconstruction



Thank you for your attention

p.s. Fortunately, we can follow-up the patient 10 months after the surgery because he extended his visa for six months.