

REFERENCES

1. Hyakusoku H, Gao JH. The “super-thin” flap. *Br J Plast Surg*. 1994;47:457–464.
2. Hyakusoku H, Pennington DG, Gao JH. Microvascular augmentation of the super-thin occipito-cervico-dorsal flap. *Br J Plast Surg*. 1994;47:465–469.
3. Ogawa R, Hyakusoku H, Murakami M, Aoki R, Tanuma K, Pennington DG. An anatomical and clinical study of the dorsal intercostal cutaneous perforators, and application to free microvascular augmented subdermal vascular network (ma-SVN) flaps. *Br J Plast Surg*. 2002;55:396–401.
4. Chetboun A, Masquelet AC. Experimental animal model proving the benefit of primary defatting of full-thickness random-pattern skin flaps by suppressing “perfusion steal.” *Plast Reconstr Surg*. 2007;120:1496–1502.
5. Gao JH, Hyakusoku H, Aoki R, Wang CH. An experimental study on the survival of random pattern flaps with a narrow skin pedicle in pigs: Comparison of survival and blood supply in thick flaps with various pedicle widths. *J Jpn Plast Reconstr Surg*. 1999;19:553.

Free Tissue Transfer in a Head and Neck Cancer Patient with Polycythemia Vera

Sir:

Hematologic disorders are rarely seen in patients with free flap reconstruction for head and neck defects. We report a patient with polycythemia vera who underwent successful free flap reconstruction.

A 50-year-old man with known polycythemia vera presented with a T2N0M0 squamous cell carcinoma of the floor of the mouth. Bilateral selective neck dissections, a marginal mandibulectomy, and resection of floor of mouth were performed. A titanium plate was used to reinforce the remaining mandible. A left anteromedial thigh flap with a segment of the rectus femoris muscle was harvested because of the lack of perforators in the anterolateral thigh territories. The muscle was used to fill the floor-of-mouth defect and cover the anterior mandible. The skin portion of the flap resurfaced the intraoral mucosal defect. The recipient vessels were the lingual artery and common facial vein.

The patient’s preoperative hemoglobin level was 18.5 g/dl and his hematocrit level was 52.7 percent. After phlebotomy preoperatively, his hemoglobin level dropped to 15.9 g/dl (Fig. 1). Intraoperatively, the patient was well hydrated and his hemoglobin level was monitored carefully. The patient lost approximately 400 ml of blood, and no blood transfusion was given intraoperatively. No intraoperative anticoagulation was given.

The patient had an uneventful recovery. His postoperative hemoglobin level was monitored daily and remained relatively stable (Fig. 1). Postoperatively, the patient received a daily baby aspirin, with no other anticoagulatory therapy. No thrombotic events occurred, and the flap survived in its entirety. He was discharged on postoperative day 6 and started on an oral diet following a negative modified barium swallow study on postoperative day 8. At 1 year, he showed excellent oral function,

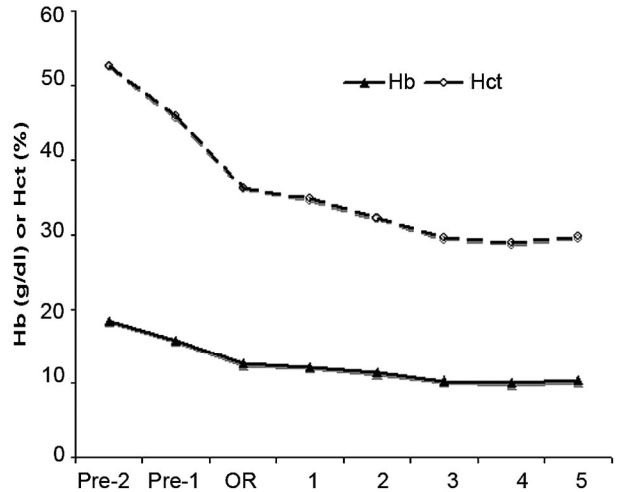


Fig. 1. The patient’s hemoglobin (Hb) and hematocrit (Hct) levels before surgery (Pre1 and Pre2), during surgery (OR), and after surgery up to postoperative day 5.

with a regular diet and normal speech, and near-normal appearance of the face and neck. A follow-up intraoral photograph is shown in Figure 2.

Free flap reconstruction in patients with polycythemia vera therefore seems a viable option, provided that necessary precautions are taken. With increased hematocrit levels and blood viscosity in polycythemia vera, microvascular thrombotic events exist.¹ Thrombotic events are present in 20 to 50 percent of patients with polycythemia vera associated with essential thrombocythemia.² Medical management for polycythemia vera involves primarily cytorreduction with phlebotomy. Interferon alfa, hydroxyurea, and low-dose aspirin are other treatment options.³ Low-dose aspirin helps prevent microvascular thrombosis.



Fig. 2. A follow-up photograph at 6 weeks shows a well-healed anteromedial thigh flap for floor-of-mouth reconstruction, without excessive bulk.