

## Correspondence

### Reliability of vascularized fibula in maintaining arthrodesis following extra-articular wide excisions of malignant musculoskeletal tumors

*To the Editor*

I read with interest the article by Leblebicioglu which was published recently in the Saudi Medical Journal.<sup>1</sup> It has been rightly pointed out by the author that complication rates of vascular fibular grafting are high. Pho<sup>2</sup> cautioned that this procedure is technically demanding, with prolonged operating time, requires extensive angiographic study of the vascular patterns of the limbs and the need to sacrifice  $\geq 2$  major vessels. Distal entry of the nutrient artery in the fibula necessitates harvesting a longer graft. In tumors of the distal radius, it implies extensive resection of the normal radius shaft and consequent affection of the flexor muscle function. Damage to the vascular pedicle by fixation screws will result in the fibula functioning as a nonvascular graft. Finally, the required expertise is unavailable in most developing countries.<sup>3</sup> In a series of 30 giant cell tumors of the distal radius treated with excision and nonvascular fibular articular grafting,<sup>3</sup> the time required for bone union was 4-6.5 months (average 5.2 months) as against 4 months reported in this series of vascularized grafts.<sup>1</sup> When the graft is fixed

rigidly, host-graft nonunion was low (7.7%) with good function of the wrist and hand. Although earlier union can be expected with vascularized fibular grafting, problems relating to host-graft union in nonvascular fibular can be minimized with rigid internal fixation. Hence, before undertaking the practically challenging procedure such as a vascularized fibular graft, these factors have to be considered.

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### *Reply from the Author*

**No reply was received from the Author.**

### *References*

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2. Pho RWH. Free vascularized fibular transplant for replacement of the lower radius. *J Bone Joint Surg Br* 1979; 61: 362-365.
3. Aithal VK, Bhaskaranand K. Reconstruction of the distal radius by fibula following excision of giant cell tumor. *Int Orthop* 2003; 27: 110-113.