

# Journal of Musculoskeletal Surgery and Research

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Author's Reply

## Re: Giant cell tumor in the proximal phalanges of the hand: a report of two cases treated with a nonbiological construct, letter to the editor

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#### Dear Sir,

We would like to thank you for your interest and raising a discussion<sup>[1]</sup> about the published article: (Giant cell tumor in the proximal phalanges of the hand: A report of two cases treated with a nonbiological construct).<sup>[2]</sup>

These types of lesions are rare and held more aggressive behaviors than similar pathology in other locations. Therefore, we agree that there is not one best treatment option in treating such primarily, and this reflect challenges in any recurrence case.

Our second case was managed primarily with excision, cementation, and hydrogen peroxide as a local adjuvant, unfortunately, developed a recurrence. We successfully managed this recurrence, with another resection and cementation with hydrogen peroxide being our only adjuvant locally. Although our primary plan was to do an amputation, the patient refused this option totally, and in our recent contact with her (April 2021), she is happy for making that choice and she is free of disease locally and systemically.

Our primary procedure was a total excision of the phalanx, and bone stock did force us away from curettage and cementation. This (curettage and cementing the cavity after phenol as an adjuvant) was Wittig's option when he reported using cementation after curettage and phenol with good outcome as a primary procedure. With only soft tissue available after resection, the only local adjuvant option we had was hydrogen peroxide. In a recent report by Omlor *et al.*, hydrogen peroxide was proven to be an efficient local adjuvant therapy for giant cell tumors of bone and reduces recurrence rate. [4]

Managing recurrent cases with another excision has been reported in similar locations (phalanges and metacarpals of the hand) by Athanasian and Averill. In both reports combined, a total of 7 recurrent cases were successfully treated without amputation or ray resection (local resection and wide excision) with follow-up period ranging from 1 to 8 years. [5,6] In an advanced technology by Beltrami using 3-D printing, he succeeded in managing an aggressive recurrence case of GCT-B of a hand proximal phalanx with excision and reconstruction with 3-D printed titanium implant with 2 years follow-up. [7] Oufkir *et al.*, in their review of GCT of small hand bones (capitate),

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4 recurrence cases were managed with another local resection and did not notice any third recurrence in a follow-up period of 1 to 5 years.[8]

Amputation and ray resection is an option to reduce recurrence; at the same time, it is the most aggressive locally. We cannot be certain that our chosen procedure is the standard of care. Therefore, we agree to have more international collaboration groups and registry of cases to understand better and conclude a cure.

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