note, this could be particularly useful in cases requiring complex medical care.

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Extensor Tendon Injuries

To the Editor:

We read with great interest the article by Matzon and Bozentka concerning extensor tendon injuries. ¹

Although the injuries are not common, we believe that the section in the authors' article treating injuries of zone VIII–IX should be more developed, because injuries at this zone are usually closed avulsion injuries² and usually are misdiagnosed or diagnosed late.

Pain on the dorsal aspect of the forearm and occasional hematoma formation due to disruption of the musculotendinous junction are important clinical findings.

In delayed presentation, ultrasound or magnetic resonance images are useful to provide the proper diagnosis and know the exact location of the lesion to best plan the surgical procedure. Direct repair, tenodesis, tendon grafting, or transfers are suitable surgical options. Results might be variable, but in our case we had a good clinical result, as illustrated in our article, following direct repair.²

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In Reply:

We would like to thank the authors of the letter for their interest in our article concerning extensor tendon injuries. We agree with their observation that a discussion regarding extensor tendon injuries in zones VIII and IX should also include closed avulsion injuries. In our experience, these closed avulsion injuries of the forearm are uncommon, and a high index of suspicion is necessary to prevent misdiagnosis. We appreciate the authors' suggestion for the supplemental information and their valuable addition to the literature.

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Evaluation of Function and Appearance of Adults With Untreated Triphalangeal Thumbs

To the Editor:

I read with great interest the article published by Zuidam et al. in your distinguished journal. The respected authors have presented the evaluation of function and appearance of the untreated triphalangeal thumbs in adults. 1

Buck-Gramcko believed that the triphalangeal thumbs might vary in appearance from the most rudi-

mentary triangular middle phalanx to a fully developed 5-fingered hand.²

In addition to the triphalangeal thumb associated with the thumb polydactyly, because some patients with triphalangeal thumbs are unable to perform opposition, Miura and Wood recognized 2 types of triphalangeal thumbs: opposable and unopposable.^{3,4} The treatment for unopposable triphalangeal thumb is different from that for the opposable triphalangeal thumb.²⁻⁶

Some authors refer to the unopposable triphalangeal thumb as a *5-fingered hand anomaly*.^{3,4} Lamb et al. considered a distinction between the 5-fingered hand anomaly and the opposable triphalangeal thumb anomaly.⁷

Hovius et al. have recognized previously that the unopposable, 5-fingered hand anomaly is a variant of the triphalangeal thumb anomaly. Most of their triphalangeal thumb patients in the Netherlands had inadequate opposition.⁸

Zuidam et al. have reported that some patients had diminished opposition but most of them could reach a thumb—finger pinch up to the proximal interphalangeal crease of the little finger. In the results section, one of 12 patients had zero opposition strength due to the lack of opposition, and his or her function and appearance are mixed with the rest of the patients who had opposition. Zuidam et al. did not distinguish clearly between the opposable and unopposable triphalangeal thumbs in their study. Lack of opposition is a major functional deficit, and patients without opposition might seek treatment earlier in their life to improve their hand function. It seems that the respected authors' conclusion is mostly relevant to the untreated opposable triphalangeal thumb anomaly.

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In Reply:

We totally agree that the triphalangeal thumb has a broad spectrum of appearance. This broad spectrum was categorized in 3 types by Wood¹ and 6 types by Buck-Gramcko² to facilitate communication, research, and comparison. However, in our group of patients, most patients can reach the little finger without true radial abduction and pronation, often referred to as *pseudo-opposition*. All patients have thenar muscle hypoplasia in different forms; rarely, the little finger is not reached at all. We feel that the original classification of opposable and nonopposable triphalangeal thumbs does not present clear-cut differences, but a more gradual spectrum of increasing hypoplasia. This should be taken into account when viewing the results.

In the presented results, all adults were classified using the classic classifications. As designated in Table 1, one adult had a nonopposable triphalangeal thumb. This 62-year-old woman had visual analog scale scores of 7.5 for function and 0.5 for cosmetic appearance. She scored a 4 on the Kapandji opposition test and 0 strength for opposition because she was not able to adequately perform the task. Despite the poor opposition movement and strength, she scored 7.3 in functionality of the thumb; in the average for the entire group was 7.7.

We agree that the nonopposable thumb should have a bigger impact on daily function compared to the opposable thumb, although in the reported, specific case, it did not. We still believe, as mentioned in the discussion, that there is a selection bias, as all these adults did not seek surgical intervention.

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