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We still do not know which patients with a(n) (almost) simple elbow dislocation need an operative treatment

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To the Editor

With great interest we have read the article of Mühlenfeld et al. [1] regarding epidemiology and treatment of acute elbow dislocations. Seventy-three percent of a group of patients with a simple elbow dislocation (i.e. without associated osseous injury) were treated operatively and 27% without surgery. All patients with an ‘unstable simple elbow dislocation’ underwent surgery in the group studied. This study recommends primary surgical repair as first-line treatment for patients with ‘unstable simple elbow dislocations’ independent of age to achieve a congruent and stable joint. However, we believe that you can only state this for unstable simple elbow dislocations if a (randomized) comparison is made between the outcomes of an operative group and a non-operative group.

Blanco et al. [2] state that self-limited diseases can produce strong overestimations of effectiveness for treatments that actually have no effect on the course of the disease. Just looking at the results of surgery could foster a delusory belief of effectiveness, even if the treatment is completely ineffective. In the article of Mühlenfeld et al. [1], such an overestimated effect could arise by only looking at the surgical outcomes in unstable simple elbow dislocations.

Especially on the topic of the ongoing discussion on the determination of the appropriate treatment of unstable simple elbow dislocations, this should be avoided [2]. In the case of the article of Mühlenfeld et al., this potential delusory belief of effectiveness could be remedied by comparing the results of the operation with the results of conservative treatment in the same group.

Josefsson et al. [3] showed generally good results for both the non-surgical and surgical treatment of unstable simple elbow dislocations in two cohorts of patients. By comparing the clinical outcome after non-surgical and surgical treatment, the potential delusory belief of effectiveness was avoided. No statistically significant difference was seen between the groups. Therefore, no treatment is preferred for patients with unstable simple elbow dislocations. In addition, a study by Schnetzke et al. [4] suggests that the type of treatment should be determined based on the elbow laxity. A slight laxity should be treated conservatively. Surgical ligament repair is indicated when a moderate or gross laxity is seen in the unstable simple elbow dislocation. Moreover, in general, the outcome of nonsurgical treatment of simple elbow dislocations is good [5]. If the treatment is a suitable option for the patient, early mobilization may even be preferable from a socio-economic point of view.

Thus, this study concludes that not all unstable elbows should be treated surgically, but that the optimal treatment should be assessed individually for each patient.

In conclusion, there is no evidence in the article of Mühlenfeld et al. [1] for operating on (almost) simple elbow dislocations, even if they are less stable. Surgery may provide a favorable outcome over non-operative treatment, but this cannot be concluded on the basis of this study. Future studies should focus on this comparison and also identify subgroups of patients having a simple elbow dislocation who benefit from surgery.

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Compliance with ethical standards

Conflict of interest Huub de Klerk, Denise Eygendaal, and Michel van den Bekerom declare that they have no conflict of interest.

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