

LETTER TO THE EDITOR

Response to Soft-plastic brace for lower limb fractures in patients with spinal cord injury

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Dr Meiners¹ raised several important comments in relation to our recent publication in *Spinal Cord*.² We would like to respond to this letter.

In Japan, hospitals often provide both acute care and subsequent rehabilitation during a single hospitalization. In our paper, the average time taken for fracture union alone was 80.1 days, and this is not significantly different from the results of Meiners *et al.*³ In fact, our method can be performed as outpatient treatment as well, and we have successfully treated four cases without admission.

We would like to inquire about the evidence for implied adverse effect on the sitting position from deviations of the femorotibial angle axis by Meiners *et al.*³ Among the references cited in Meiners *et al.*'s 2003 paper, Ingram *et al.*⁴ wrote 'In non-ambulatory patients with lower limb fractures, a degree of shortening or angulation is unimportant'. All of our patients could use their wheelchairs after treatment, the same as pre-injury.

None of our patients suffered from severe complications. In one of our cases, the bone had not united at the time of writing our paper, but had achieved union a few months after submission. We strongly believe that our method is a useful option, at least for fracture around the knee joint or fracture of shaft of the tibia or femur, that serves as a

conservative approach to treat such fractures of the lower extremities in patients with spinal cord injury.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

K Uehara and M Akai

Department of Rehabilitation for Movement Functions, Research Institute, National Rehabilitation Center for Persons with Disabilities, Saitama, Japan

E-mail: uehara-ko@room.ocn.ne.jp

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- 2 Uehara K, Akai M, Kubo T, Yamasaki N, Okuma Y, Tobimatsu Y *et al.* Soft-plastic brace for lower limb fractures in patients with spinal cord injury. *Spinal Cord* 2013; **51**: 327–330.
- 3 Meiners T, Keil M, Flieger R, Abel R. Use of the ring fixator in the treatment of fractures of the lower extremity in long-term paraplegic and tetraplegic patients. *Spinal Cord* 2003; **41**: 172–177.
- 4 Ingram R, Suman R, Freeman P. Lower limb fractures in the chronic spinal cord injured patient. *Paraplegia* 1989; **27**: 133–139.