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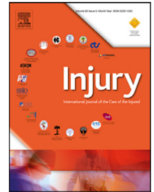

Letter to the editor

Scaphoid non-union during covid-19 pandemic: Need for a smart strategy

Dear sir,

The Covid-19 pandemic has changed our lives as hand surgeons. Working within the hospitals, we are almost completely devoted to trauma and emergency surgery [1].

I recently observed a strange phenomenon: many cases of late presented scaphoid fractures (non-unions and delayed unions). These type of diseases had become infrequent during the last years. On the contrary, today we have to confront the consequences of the effects of the pandemic, with many patients who did not come to the hospital at the moment of the trauma, fearing contagion and contamination. As a consequence, they refer to the surgeon too late.

However, we have to change our point of view. Should these cases be considered urgent? How much time can they wait before surgery? If we do not act properly, in the next year we will be forced to treat negative consequences resulting from the lack of an appropriate treatment.

Taking into account the current health situation, on the threshold of a second pandemic wave, the following problems should not be neglected.

Firstly, to perform the right diagnostics. CT scan should be performed before treatment in case of scaphoid fracture/non-union, to evaluate if there is a bone loss or humpback deformity. [2] Compared to MRI, CT scan is more useful and easier to perform. Furthermore, MRI takes longer to execute with higher risk of contagion and contamination for the patient.

Secondly, to choose the right treatment for each patient. There is no single, universal acceptable way to treat scaphoid non-union [2–4]. We must adapt our treatment choices to the actual situation. In the case of minimal bone resorption (up to 2 mm gap), I personally recommend percutaneous fixation of the fracture/non-union site using a headless screw. Scientific evidences support fixation alone in the case of minimal bone resorption [3,4]. In this case managing the patient could be easier and scaphoid will probably heal. Despite my approval for open surgery as treatment of scaphoid non-union, at this moment in history, I personally advise to avoid the use of open surgery (e.g. bone graft, plate, staple) unless strictly indicated (e.g. severe bone loss, severe deformity). [2, 5, 6] This is why open surgery is more susceptible to postoperative complications and post-operative physiotherapy is more demanding in this case of patients.

Finally, I received urgent appeals from many patients suffering from scaphoid non-union on the waiting list for open surgery (bone graft). They asked to be operated on in view of the new lockdown, due to a reduced or stopped working activity. I hope that I do not arrive too late, thus salvage procedues should be considered for scaphoid non-union advanced collapse (SNAC) wrists.

In conclusion, nowadays managing a patient with a scaphoid non-union is not easy during the Covid-19 pandemic. Smart strategies should be implemented to face this and similar problems on the second wave threshold.

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Declaration of Competing Interest

The authors report no conflicts of interest.

References

[1] De Vitis R, Passiatore M, Perna A, Proietti L, Taccardo G. COVID-19 contagion and contamination through hands of trauma patients: what risks and what precautions? J Hosp Infect 2020;105:354–5. https://doi.org/10.1016/j.jhin.2020.03.037.
[2] De Vitis R, Passiatore M, Perna A, Tulli A, Pagliei A, Taccardo G. Modified Matti-Russe technique using a “butterfly bone graft” for treatment of scaphoid non-union. J Orthop 2020;19:63–6. https://doi.org/10.1016/j.jor.2019.11.030.
[3] Pinder RM, Brkljac M, Rix L, Muir L, Brewster M. Treatment of scaphoid nonunion: a systematic review of the existing evidence. J Hand Surg Am 2015;40:1797–805. e3 https://doi.org/10.1016/j.jhsa.2015.05.003 .
[4] De Vitis R, Passiatore M, Perna A, Fioravanti Cinci G, Taccardo G. Comparison of shape memory staple and gelled platelet-rich plasma versus shape memory staple alone for the treatment of waist scaphoid nonunion: a single-center experience. Joints 2020. https://doi.org/10.1055/s-0040-1710387.
[5] De Vitis R, Passiatore M, Cilli V, Maffeis J, Milano G, Taccardo G. Intramedullary nailing for treatment of forearm non-union: is it useful? - A case series. J Orthop 2020;20:97–104. https://doi.org/10.1016/j.jor.2020.01.011.
[6] Talia AJ, Fraval A, Halliday L, McKie G, Paiva J, Thai DM. Scaphoid specific volar locking plate and non-vascularised iliac crest bone graft in scaphoid non-union. A comparative cohort study. J Orthop 2019;16:337–41. https://doi.org/10.1016/j.jor.2019.03.005.

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