

Additional Considerations in Pediatric Clavicle Fracture Non-Union: An Under-Recognized Clinical Entity

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Learning Point of the Article:

This report emphasizes the need for heightened awareness of this rare complication and its important differential diagnoses. Further studies are warranted to better define risk factors and establish follow-up protocols tailored to pediatric patients with clavicle fractures.

Dear Editor-in-Chief,

Having read the article by Kumar et al., titled Clavicle Fracture Non-Union in a 3-Year-Old Child: A Case Report and Literature Review published in the Journal of Orthopaedic Case Reports 2026 March;16(03):179–183, with great interest, I would like to commend the authors for reporting an exceptionally rare case of clavicle fracture non-union in a very young child and demonstrating its successful surgical management with a favorable functional outcome [1]. The report adds valuable clinical insight to the limited existing literature on this unusual complication of an otherwise commonly encountered pediatric injury. However, there are a few additional considerations that may further enrich the present discussion.

To the best of my knowledge, the existing literature on clavicle fracture non-union in the pediatric population has predominantly been reported in older children and adolescents [2–7]. While Duplaintier et al. reported post-traumatic clavicle non-union in a 4-years-old child [8], Kumat et al. reported the condition in a 3-year-old child [1], further emphasizing the rarity and potential under-recognition of clavicle fracture non-union in toddlers.

The present case emphasizes that significant displacement and lack of cortical apposition may contribute to failed union even in very young children with substantial remodeling and healing capacity. This observation challenges the prevailing notion that clavicle non-union is virtually nonexistent in toddlers and reinforces the importance of vigilant clinico-radiological follow-up.

In previously reported pediatric clavicle non-union cases, differential diagnoses such as congenital pseudoarthrosis of the clavicle, cleidocranial dysplasia, and neurofibromatosis has often been emphasized, particularly in very young children presenting with longstanding clavicular deformity [2-8]. Apart from histopathological evaluation to exclude congenital pseudoarthrosis of the clavicle, additional discussion by the authors regarding the clinical, radiological, and intraoperative features favoring traumatic non-union would have further strengthened the diagnostic interpretation. Moreover, interpretation of persistent pain and functional limitation resulting from an injury reportedly sustained at approximately one year of age may be challenging, as symptoms in preverbal or early verbal children are often inferred indirectly through parental observations rather than reliable subjective symptom reporting.

Author's Photo Gallery



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Although the manuscript is presented as a “case report and literature review,” the literature synthesis remains relatively concise. Inclusion of a more detailed comparison with previously reported pediatric clavicle non-union cases could have further enriched the discussion regarding age distribution, fracture characteristics, management strategies, and outcomes in this uncommon entity [2-8].

Currently, the lack of clear guidelines regarding routine radiographic surveillance in pediatric clavicle fractures may contribute to delayed recognition of complications such as non-

union, thereby highlighting the importance of early identification and timely intervention to potentially prevent prolonged morbidity.

This report therefore not only adds to the limited literature on pediatric clavicle fracture non-union but also contributes to the evolving understanding of this rare complication while highlighting the need for further studies addressing risk factors, follow-up protocols, and diagnostic considerations in this uncommon entity.

Declaration of patient consent: The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given the consent for his/ her images and other clinical information to be reported in the journal. The patient understands that his/ her names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Conflict of interest: Nil **Source of support:** None

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