

34th Euro-Global Summit on **Cancer Therapy & Radiation Oncology**
 &
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 13th International Conference on **Orthopedics, Arthroplasty and Rheumatology**
 July 25-27, 2019 London, UK

Re-audit of torus fracture management at Queen's Hospital, United Kingdom

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Statement of the problem: Buckle fractures also known as torus fractures are commonly caused by a fall on the outstretched hand and are most often seen in the paediatric population. The mechanism of injury leads to compression and subsequent buckling of the dorsal cortex but the volar cortex is usually unaffected. NICE (NG38) recommend that children with torus forearm fractures should not have rigid casts and should be discharged from hospital after assessment and reassurance. Our initial audit reviewed the practice in our unit between August-October 2017 and it showed that 95% of patients were treated with a cast and 86.2% attended for a follow-up visit. Following this, recommendations were made including education regarding management as per NICE guideline with application of wrist splints in the Emergency Department (ED) or Fracture Clinic and discharging the children after providing carers with information leaflets and reassurance.

Methodology & Theoretical Orientation: Retrospective audit of all buckle fractures referred to the Fracture Clinic between July–September 2018 (inclusive). Clinic letters and images reviewed using MediSec and PACS, respectively.

Findings: Thirty-six patients were included (63% male; mean age 9 years). In ED, 19% of patients were given a splint compared to 0%. In fracture clinic, 54% were given a splint and of those only 38.9% were discharged at first visit. A further 55.6% of patients were brought back for a second visit. Four patients were given a cast due to size issues or patient preferences.

Conclusion & Significance: Despite the improvement seen regarding compliance with NICE guidelines, work is needed to further enhance compliance. Staff education and optimising splint availability will be a priority to reduce the burden on fracture clinic resources by unnecessary follow-up appointments.



Recent Publications

1. Hill C E, Masters J P and Perry DC (2016) A systematic review of alternative splinting versus complete plaster casts for the management of childhood buckle fractures of the wrist. *J Pediatr. Orthop. B.* 25(2):183-90.
2. Jiang N, Cao Z H, Ma Y F, Lin Z and Yu B (2016) Management of Pediatric Forearm Torus Fractures: A Systematic Review and Meta-Analysis. *Pediatr. Emerg. Care.* 32 (11):773-778.
3. National Institute for Health and Care Excellence. (2016). Fractures (non-complex): assessment and management (NICE Guideline NG38). Retrieved from <https://www.nice.org.uk/guidance/ng38>

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4. Firmin F, Crouch R. Splinting versus casting of "torus" fractures to the distal radius in the paediatric patient presenting at the emergency department (ED): a literature review. 2009. In: Database of Abstracts of Reviews of Effects (DARE): Quality-assessed Reviews [Internet]. York (UK): Centre for Reviews and Dissemination (UK); 1995-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK77692/>
5. B.A. Williams, C.A. Alvarado, D.C. Montoya-Williams, R.C. Matthias, L.C. Blakemore. Buckling down on the torus fracture: has evolving evidence affected practice ?<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5902745/>

Biography

Dr Faris is a foundation year Doctor with passion for Orthopaedics. He is currently working under the Trauma & Orthopaedic's team in Queen's Hospital Burton, UK. The whole team of authors from our unit endeavour to improve the quality of patient care and improve efficiency.

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