

# Medical Events 2021

## Neurovascular status documentation pre and post ankle fracture reduction at a major trauma centre; a multicycle closed loop audit.

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### **Aims:**

Ankle fractures are common injuries arising from torsional trauma. The British Orthopaedic Association Standards for Trauma and Orthopaedics (BOAST) issued the BOAST-12 guidelines (2016) on the management of Ankle fractures, stating that neurovascular status should be documented pre- and post-reduction. However a UK-wide audit, AUGMENT (2021), showed that only 41.7% of patients received BOAST-12 compliant management.

### **Methods:**

Data on BOAST-12 adherence of neurovascular status was collected from twenty consecutive patients per data collection period, who were referred to King's College Hospital Orthopaedic department with ankle fractures requiring reduction. Interventions included teaching sessions on guideline adherence and circulation of emails to on-call staff, highlighting the risks of incomplete documentation. Data was collected pre and post interventions. Two full cycles were completed.

### **Results:**

Overall, post-interventional BOAST-12 guideline adherence was 66%, higher than the national average. Pre-reduction neurovascular documentation remained consistently above 85%. However, significant oscillations in post-reduction neurovascular documentation were present throughout the audit. Initially, only 30% of patients had post-reduction neurovascular status documented. Our first intervention increased post-reduction neurovascular status documentation by 117%, to over 65%. However, on commencement of the second cycle, post-reduction neurovascular documentation had dropped back to 18%. Further interventions doubled documentation back to 30%. The variations in results for this multicycle audit highlight the importance of regular teaching on guideline adherence to avoid complacency. Creating standardised proformas for patient admissions should be considered to ensure continuous guideline adherence. It is particularly pertinent for emerging trauma networks to consider practical methods for adherence to ensure immediate compliancy.

### **Biography:**

Vivien Graziadei is a Junior Registrar in General Surgery in Wellington New Zealand. She graduated from Trinity College Dublin in 2019 before working as a Senior House Officer in the Major Trauma Centre, King's College Hospital, and London. She is currently undertaking masters in Trauma Sciences. She has been a member of international research collaboratives which have been published in the Lancet journal and the British Journal of Surgery.

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