**Title:** Improving Nutritional Support For Post-surgical Femur Fracture Patients At St Mary's Hospital, London.

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**Introduction:**
Malnutrition represents a common complication in femur fracture patients and is primarily caused by poor dietary intake. Malnutrition is associated with poor clinical outcomes, and is the strongest independent risk factor for recurrent femur fracture. High protein oral nutrition supplements (ONS) have been associated with improved clinical outcomes after femur fracture, including reduced complications, length of hospital stay, mortality and bone mineral density loss, and increases in functional status and quality of life.(1) Accordingly, the European Society for Clinical Nutrition and Metabolism (ESPEN) advocates the use of ONS with all femur fracture patients in hospital.(2)

**Aim:**
To improve nutritional support for post-surgical femur fracture patients at St Mary's Hospital, London.

**Methods:**
We plan to carry out three PDSA cycles to evaluate whether two separate interventions are effective in increasing the prescription rate of ONS in post-surgical femur patients. 'Intervention 1' comprised a dietician-led presentation during the Geriatric department weekly teaching session. 'Intervention 2' consisted of the addition of a 'reminder' column to doctors' patient lists. Each PDSA cycle included all patients who underwent surgical treatment for femur fracture during a one month period.

**Results:**
'Cycle 1' included 18 patients (mean age: 84.6 years; range: 68-98 years) treated in March 2021. ONS were prescribed in 6% (n=1/18) post-surgical femur fracture patients. 'Intervention 1' (local teaching sessions) resulted in a substantial improvement in ONS prescription rate from 6% to 71% (n=10/14). 'Intervention 2' (reminder prompt for doctors) resulted in an increase from 71% to 73% (n=8/11) prescription rate.

**Conclusion:**
'Cycle 1' results revealed low rates of ONS prescriptions for post-surgical femur patients. Both interventions represent effective strategies to improve the prescription rate of ONS for NOF patients. However we believe that regular teaching sessions would be the more effective long term strategy to improve ONS prescription rates. We recommend longer term PDSA cycles to assess the sustainability of interventions above. We believe that doctors' and dieticians' awareness of the importance of nutritional support for post-surgical femur fracture patients is key to the success of this quality improvement project.

**References:**


1. Royal College of Physicians, National Hip Fracture Database annual report 2019. London: RCP, 2019.
2. Dorothee Volkert, Anne Marie Beck, Tommy Cederholm. ESPEN guideline on clinical nutrition and hydration in geriatrics, 2018, 38, 10-47.


**Biography:**

Dr Liam Donnelly is a trauma and orthopaedic Senior House Officer at Chelsea and Westminster Hospital, London.