

## Optimising Care for Neck of Femur (NOF) Fracture patients in Trauma & Orthopaedics

### Aim

Over 3million people over 65 fall at least once a year. In 2019, 67,000 people presented with a hip fracture ( NHF 2019). A hip fracture is the most common serious injury in older people and the commonest cause of death following an accident with a significant associated cost to the NHS of £4.3 billion a year. At any one time hip fracture patients occupy 3,600 beds in the UK and per year 1.5 million hospital bed days are used with the average length of stay being 20 days. As a Trust we see the highest number of hip fracture patients in the UK , with nearly 1000 patients a year, therefore it is paramount we get care right.

In England, Orthopaedic teams are expected to work to a Best Practice Tariff (BPT) consisting of specific key performance indicators, that rewards trusts who achieve all KPI's, issuing additional per patient funding to meet the cost of delivering best practice. Two key areas of interest for us at the moment are; Prompt delirium assessment post-operatively and secondary prevention by offering assessment of bone protection and offering injectable treatments

Historically, Poole have performed very well in deliriums screening however changes in service provision due to the Coronavirus pandemic saw the trust drop to 0% assessments completed. The dementia team who previously performed the screening were no longer in a position to support and using existing resources we had to find a way to over come this. Offering IV bone protection is a new initiative taken on in line with NICE guidance.

**AIMS:**

1. To improve use of 4AT delirium screening tool post-operatively to achieve the national best practice tariff.
2. To offer IV bone protection as secondary prevention to patients unable to tolerate oral bone protection due to previous medical condition such as hiatus hernia/indigestion.

### Improvements and measurements

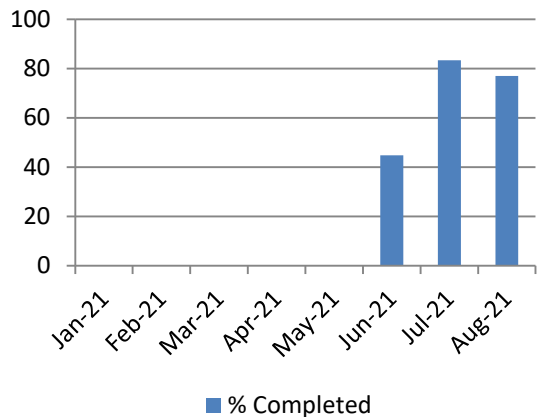
**Delirium Screening**

The focus was to embed post-operative screening into practice however it was recognised that this would not be achieved overnight. The ward teams had not been asked to complete screenings before and therefore gaps in knowledge were to be expected. In addition, there was no time to plan formal teaching or preparation.

Considering the situation, the Advanced Care Practitioner (ACP) led by example. The project began mid-May with patients being identified as needing to be screened daily by an ACP and the assessment prepared in the notes. The same patients would be followed up later that day to collect the outcome of the assessment ready for submission to the National Hip Fracture Database. Informal teaching and support has been delivered at ward level to improve knowledge and use of the tool and embed the process into our post-operative practice.

In addition, we have received support from the Orthogeriatric Consultants team in focusing the medical teams on the issue of delirium, having a positive impact on outcomes.

The recent recruitment of an administrator to the Theatre assessment and coordination team (TACTeam) has taken the project one step further supporting contemporaneous submission of results to the National Hip Fracture Database. Since the initial PDSA cycle, the project has been well received and we have seen steady improvements as demonstrated in the graph opposite. Data for September is pending but we expect to see continued improvement.



**IV Secondary Bone Protection**

Prior to this project we were not able to routinely offer IV zoledronate to patients over 75 with fragility fractures. After working collaboratively with the nursing staff in the Treatment Intervention Unit (TIU) we developed a pathway to allow this treatment option to be offered.

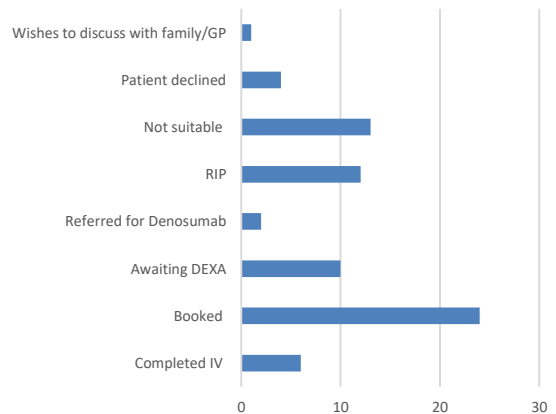
As the ortho-geriatric ACP I developed a spreadsheet from March 2021 identifying patients deemed suitable by the OG Consultant for yearly IV zoledronate. Data from the NHFD shows we are one of many hospitals with 0% of patients being offered injectable secondary prevention, with the highest percentage being 67% .

Patients are assessed on admission by the ACP or one of the Orthogeriatric team and if suitable are booked in for their post operative infusion at the TIU at Poole hospital following discharge.

Vitamin D levels are checked on admission and replaced during the inpatient stay if necessary. The patient is given an information leaflet , currently the national osteoporosis society however we are planning on developing our own local leaflet and the GP is also informed of the plan via the discharge letter.

91 patients were identified from March 2021 - August 2021. The orthopaedic junior doctors are now familiar with informing the ACPs of a suitable patient under their care and request the appropriate investigations prior to discharge and prescribe medication as required .

A review of patient suitability for IV bone protection is to be undertaken before the end of 2021 to ensure effective utilisation of resources .



### Outcomes and lessons learnt

In the early stages of the delirium project the results were positive. We need to achieve consistency with screening and aim to screen all patients. With the support of our administrator we will have more reliable data collation. The gaps in knowledge was very much the crux of the problem and to address this we plan to rollout a formal training programme in November with a focus on both screening and assessment as well as appropriate management if patients are identified as delirious. All members of the MDT will have access to this training and be encouraged to attend to facilitate a multi-disciplinary approach. The training programme will also tie in with the launch of the electronic 4AT assessment tool available of EPR. Watch this space!

We noted a number of issues during the identification of patients suitable for IV bone protection which included, patients not prescribed calcium supplements on discharge, vitamin D deficiency not replaced /load dosed prior to discharge and the GP not informed via the discharge letter of the IV bone protection. These can be resolved through improved communication ,training and awareness of the orthopaedic junior medical team . Patient information leaflets also need to be routinely offered when IV bone discussed during the inpatient stay and a new challenge is now bloods within 4 weeks of the IV infusion is required in TIU . We are keen to overcome these issues and provide an alternative to oral bone protection for our patients and an improvement in service provision.

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