MANAGEMENT OF PATIENTS ON ORAL ANTICOAGULANTS FOR URGENT FRACTURE NECK OF FEMUR SURGERY: A QUALITY IMPROVEMENT PROJECT

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INTRODUCTION:

Fracture neck of femur (#NOF) is common in elderly population. They generally present with multiple medical problems and at least 10% of the population are on oral anticoagulants at the time of presentation. This poses huge challenge to anaesthetise and to operate on them safely. National fracture femur audit recommends these patients are operated on preferably under 36hrs. This allows multiple benefits for the patients like:-

- Early mobilization - Less chance of DVT
- Reduced chest infection
- Reduced mobility & tissue viability problems
- Early pain relief
- Less delirium & cognitive problems
- Promote better end of life care

Surgery was delayed for several reasons in 30% of patients and anticoagulation was found to be the most common reason.

Aim:

- ❖ Audit the time taken for the patients with #NOF from the time reported to A&E to time of operation.
- ❖ Identify & distinguish patient with complex fractures requiring:
 - ✓ Special investigations
 - ✓ Dedicated hip surgeon to do complex hip replacement surgery
 - ✓ Other factors causing delay which could be managed better to achieve operation under 36hrs

Methods and materials:

- ❖ Trauma coordinator in Stepping hill hospital maintains a database to record the admission time to theatre times for every #NOF patient.
- ❖ Information is logged in under following headings:
 - 1) Date & time of Admission
 - 2) Date & Time of Operation
 - 3) Delay in surgery
 - 4) Reason for delay
 - 5) Additional comments
- ❖ 430 patients were admitted between 1st March 2017 to 30th March 2018 with #NOF, of whom 417 patients underwent surgery, 8 were managed conservatively either due to patient refusal or poor general health and 5 patients succumbed even before they could be taken up for surgery.
- ❖ Those patients who waited for more than 36hrs for surgery were then stratified from the rest.
- ❖ This group was subsequently analysed for reason for delay in relation to:
 - 1) Complex fracture – Requiring the expertise of a dedicated hip surgeon.
 - 2) Need for extra investigation like CAT scan, MRI scan, Echo etc.
 - 3) Patient factors like patient refusal, medical comorbidities like Acute Coronary Syndrome (ACS), Atrial fibrillation, Community acquired pneumonia, Diabetic ketoacidosis, pacemaker requiring interrogation etc which required patient optimisation.
 - 4) Hospital factors like lack of theatre time.
 - 5) Reasons which could potentially be improved like patients on oral anticoagulants.

Discussion:

- ❖ 43 patients were affected because of anticoagulation.
- ❖ We liaised with perioperative anticoagulation lead & the haematologist and developed a local guideline to manage patients for DHS & hemiarthroplasty surgery under 36hrs.
- ❖ This is now piloted and will become formal guideline for #NOF patients.

Recommendations:

- ❖ Re-audit after 6 months.
- ❖ Availability of Factor Xa & DTT time.

References:

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