Management of fractured neck of femur patients taking direct-acting oral anticoagulants

Reference #: FSFH-ORTH-GUI-0002

Scope

<table>
<thead>
<tr>
<th>Site</th>
<th>Service/Department/Unit</th>
<th>Disciplines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiona Stanley Hospital</td>
<td>Orthopaedic Surgery, Ortho-Geriatrics</td>
<td>Medical, Nursing and Pharmacy</td>
</tr>
<tr>
<td>Fremantle Hospital</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Introduction

There is no consensus guideline on management of DOACS in hip fracture patients. This guideline is based on best local and international consensus and experience and has been agreed by FSH Haematology, Anaesthetics, Orthopaedics and Geriatrics. This policy outlines the management of patients with a hip fracture who are taking DOACS.

The bleeding risk due to Direct-acting Oral Anticoagulants (DOACs) must be minimised prior to urgent surgery for fractured Neck of Femur (NOF) patients. In cases of significant renal dysfunction (CrCl<30mL/min) seek specialist advice and assay levels.

2. Guideline

2.1. DOAC Information

DOACs include: Apixaban, dabigatran and rivaroxaban.

Indications include: treatment of DVT/PE, non-valvular AF, VTE prophylaxis (total hip or knee). For further information refer to WA Anticoagulation Chart.

3. Peri-operative Management

1. Stop DOAC
Management of fractured neck of femur patients taking direct-acting oral anticoagulants

2. Document
- Indication for DOAC
- Patient weight
- Patient creatinine and estimated creatinine clearance (Cockroft-Gault equation)
- DOAC name, dose, time of last dose
  Check baseline coagulation tests: PT/INR, aPTT, Thrombin Time, DOAC level (specify drug)

3. Determine DOAC Clearance Time
- Check Hb and specific drug level at 0600 hrs on the morning of surgery and discuss with Ortho-geriatrics team in trauma meeting (who may call Thrombosis Team)

4. Determine safe time for surgery
   Surgery is safe from DOAC perspective when
   - Coagulation tests are normal, AND
   - DOAC Blood level less than 50ng/mL
   Yes: Surgery to be decided by multidisciplinary team in conjunction with other clinical factors
   No: Ortho-geriatrics review and consider calling Thrombosis Team for advice

5. Urgent Surgical Intervention
   Assess increased bleeding risk against surgical urgency.
   If still required, seek Haematology advice.

3.1 Post-operative Recommencement of DOAC
   If bleeding is absent, resume DOAC 48-72 hours following fractured NOF surgery, or as agreed by Surgical/Ortho-geriatrics Team. If high thrombosis risk, consider prophylactic dose of heparin 12-24 hours following surgery. Consider contacting Thrombosis Team for advice.
   Refer to FSFHG Guideline for Pre-operative and Pre-intervention Management of Medications

3.2 When to Refer to Haematology
- Haemostatic products are required, e.g. patient bleeding or surgery is not deferrable
- Coagulation results difficult to interpret, or requesting and interpreting drug specific levels
- Significant renal dysfunction (CrCl less than 30mL/min)
- Other significant haematological concerns
4. Compliance/Performance Monitoring

Compliance and performance of this guideline will be monitored through routine clinical incident review process through clinical audit.

5. Related Policy Documents

FSFHG

- Guideline for Pre-operative and Pre-intervention Management of Medications
  FSFH-HW-GUI-0012

6. Related Standards

NSQHS Standards:

- Clinical Governance
- Medication safety
- Comprehensive care
- Communicating for safety

7. Bibliography

- Local Data from FSH using DOAC levels in NOF patients
- Clinical Excellence Commission NOAC Guidelines 2017

8. Authorisation

<table>
<thead>
<tr>
<th>EXECUTIVE SPONSOR: Medical Director, Service 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARENT COMMITTEE: Drugs &amp; Therapeutics Committee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Version</th>
<th>Date Issued</th>
<th>Compiled/Revised By</th>
<th>Committee/Consumer Group Consulted</th>
<th>Endorsed By</th>
<th>Revision due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11/2019</td>
<td>Trauma / orthopaedic Clinical Nurse Specialist</td>
<td>NMPGC and DTC</td>
<td>FSFHG Policy Committee</td>
<td>11/2023</td>
</tr>
</tbody>
</table>