**Anticoagulation in patients with luminal GI cancers – the risks are GI-normous**

**Introduction:**

Anticoagulants are used to treat venous thromboembolism (VTE). Patients with cancer are at higher risk of VTE. However, they increase the risk of bleeding with serious consequences. In patients with a luminal gastrointestinal (GI) cancer, the risk of GI bleeding is higherwith a Direct Oral Anticoagulant (DOAC) or warfarin compared to Low Molecular Weight Heparin (LMWH).

Current guidelines from NICEand our local cancer referral centreadvise that the anticoagulant of choice in those with luminal cancers is LMWH. In this audit, we aimed to evaluate our compliance with these guidelines for patients admitted to hospital.

**Methods:**

Data was collected for all adult patients with a luminal cancer (oesophageal, gastric, biliary, pancreatic, colorectal - previously diagnosed or diagnosed during admission) who were anticoagulated (prior to admission or started during the admission) admitted to our hospital between August 2023 to March 2024. This included data about their anticoagulant regime, if the admission was due to GI bleeding and if any changes were made to their anticoagulant regime.

**Results:**

There were 82 admissions of patients with luminal cancers receiving anticoagulation during the study period. The mean age was 76. There were 45 males (55%) and 37 females (45%).

83% (68/82) were anticoagulated prior to admission; 45 (66%) on a DOAC, 19 (28%) on LWMH and 4 (6%) on warfarin. 17% (14/82) were started on anticoagulation during the admission; 12 (86%) on LMWH and 2 (14%) on a DOAC.

Only 44% (20/45) of those admitted on a DOAC had their DOAC stopped or changed to LMWH. However, 25% (5/20) of these cases had their anticoagulation stopped due to clinical deterioration necessitating end of life care. Only 75% (3/4) of the patients admitted on warfarin had this regime stopped or switched to LMWH.

16% (13/82) of the admissions in anticoagulated patients with luminal cancers were due to a GI bleed. Of these, 4 (31%) had colorectal cancer, 1 had cholangiocarcinoma and 2 patients each had gastric, oesophageal, pancreatic or small bowel cancers. 77% (10/13) of these cases were admitted on a DOAC of which only 60% (6/10) had their DOAC stopped or changed to LMWH.

**Conclusions:**

Our audit reveals that we are non-compliant with recommendations to consider LMWH as the anticoagulant of choice for patients with luminal GI cancers; 56% of patients were discharged on their pre-existing DOAC. Of the patients started on anticoagulation during admission, 86% received LMWH. Amongst those presenting with a GI bleed when taking a DOAC, 40% were discharged on the same regime.

Since VTE risk assessments and rationalisation of pre-prescribed medications already forms a principal standard of care for all inpatients, we believe that improving clinician/prescriber awareness of these guidelines may increase compliance and avoid complications of anticoagulation.