

Palliative Care Tip #31 – ANITCOAGULATION IN PATIENTS WITH ADVANCED CANCER CARED FOR AT HOSPICE/PALLIATIVE CARE UNIT IN EDMONTON – AUGUST 2018.

Background:

- Venous thromboembolism (VTE) is a frequent complication in cancer patients and is an important source of morbidity and mortality.
- Specific cancers are associated with a higher incidence of VTE (pancreas, brain, ovary, lung, colon, prostate, breast).
- Patients with advanced cancer cared at the hospice/ palliative care unit may have multiple other risk factors for VTE, including hospitalization, immobility, use of chemotherapy or hormonal therapy, central venous catheters, surgery, other co-morbidities (CHF, CVA, AMI, and coagulopathy), infections or a previous VTE.
- Survival is shorter in patients with advanced cancer cared at the hospice/ palliative care unit and associated VTE.

Diagnosis:

- VTE are often asymptomatic or minimally symptomatic, and symptoms are usually non-specific or mistakenly attributed to the underlying malignancy. However, the development of sudden onset shortness of breath should raise concerns of a thromboembolic complication (PE).
- There are no specific signs of VTE on the physical examination, but the development of unilateral leg swelling may be the result of a DVT.
- Spiral Computed Tomography (CT) of the chest and Venous Compression Ultrasonography (CUS) are useful for the diagnosis of VTE. These investigations may be performed if the patient's overall condition warrants it.
- Laboratory investigations like D-Dimer serum level determination are of little clinical help in the diagnosis of VTE in patients with cancer.

Treatment:

- The role of primary prophylaxis of VTE in patients with advanced cancer cared at the hospice/ palliative care unit is unclear, and does not constitute standard of care, and not recommended for those with high risk of bleeding (e.g. primary brain tumors). Each case should be analyzed individually considering benefits and burden/ risk of bleeding complications, patients and family wishes, stage in the disease trajectory and goals of care.
- The decision to treat VTE events in hospitalized patients with advanced cancer cared at the hospice/ palliative care unit should be made bearing in mind the same considerations previously mentioned for the administration of primary prophylaxis of VTE.
- In patients with advanced cancer cared at the hospice/ palliative care unit, Low Molecular Weight Heparin (LMWH) is the preferred treatment for VTE over warfarin.
- The CLOT study showed an overall relative risk reduction of recurrent VTE of approximately 52% in the LMWH group when compared with oral anticoagulation [1].

➤ Warfarin requires monitoring of INR, is given orally (not always available as a route), is associated with more bleeding complications and failure in not uncommon in patients with cancer.

- Due to the high risk of VTE recurrence after discontinuation of treatment, life-long anticoagulation is recommended for palliative cancer patients, particularly those receiving palliative chemotherapy or hormonal treatment for their malignancy. In those with ongoing risk factors such as metastatic or progressive disease or ongoing systemic chemotherapy, continuing anticoagulation may be indicated to prevent recurrence. [2]
- Most authorities recommend discontinuation of anticoagulation in actively dying patients.
- New (Direct)Oral Anticoagulants (NOACs (DOACs): Apixaban, Rivaroxaban, Edoxaban, Dabigatran) are preferable to Vitamin K Antagonists (VKA) according to the American College of Chest Physicians (ACCP) guideline updated in 2016 as alternative to LMWH, however NOACs (DOACs) have not shown greater efficacy or safety than LMWHs in the thromboprophylaxis of acutely ill cancer patients [3].

References:

- [1] Lee AY, Levine MN, Baker RI, Bowden C, Kakkar AK, Prins M, Rickles FR, Julian JA, Haley S, Kovacs MJ, Gent M. Low Molecular Weight Heparin versus Coumadin for the prevention of recurrent venous thromboembolism in patients with cancer (for the CLOT investigators). *N Eng J Med* 2003; 349:146-153.
- [2] Khorana AA, Carrier M Garcia DA, Lee AYY. Guidance for the prevention and treatment of cancer-associated venous thromboembolism. *J Thromb Thrombolysis* 2016;41:81–9.
- [3] Carrier M, Cameron C, Delluc A, Castellucci L, Khorana AA, Lee AY (2014) Efficacy and safety of anticoagulant therapy for the treatment of acute cancer-associated thrombosis: a systematic review and meta-analysis. *Thromb Res* 2014;134:1214–1219,
- [4] Maraveyas A, Muazzam I, Noble S and Bozas G. Advances in managing and preventing thromboembolic disease in cancer patients. *Curr Opin Support Palliat Care* 2017; 11: 347-354.



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