Case Study
Janet is a 72 year old female who lives with her husband in their own home. She was diagnosed with pancreatic cancer which metastasised to her lungs and liver 10 months ago. Janet did not tolerate chemotherapy and has completed a course of radiotherapy for symptom control, in particular pain from the primary tumour.

She has been diagnosed with a small pulmonary embolism (PE) after presenting to the emergency department with left sided chest pain, worse on deep inspiration and some shortness of breath with decreased exercise tolerance.

Venous Thromboembolism in Cancer
Patients with cancer are at higher risk of developing an initial venous thromboembolism (VTE) as well as recurrent VTE. This increased risk is due to multiple factors including:
> Underlying malignancy;
> Chemotherapy and hormonal treatments; and
> Decreased mobility and indwelling central venous catheters.

They also have increased risk of bleeding complications associated with VTE management.

Primary Prophylaxis for VTE
Despite an increased risk of developing VTE, pharmacological prophylaxis is not routinely recommended for patients with cancer in the community.

A study did show benefit of prophylaxis with low molecular weight heparin (LMWH) in patients with locally advanced metastatic pancreatic cancer. This was only in patients who were receiving first-line chemotherapy. There was significantly lower rate of VTE without increased risk of bleeding, compared to placebo. There is limited data for LMWH prophylaxis in other solid tumours.

Patients with multiple myeloma are at higher risk of VTE due to patient-related, myeloma-related and myeloma treatment-related factors including the use of thalidomide, lenalidomide and pomalidomide.

Given Janet’s history, prophylactic therapy was not prescribed prior to the diagnosis of PE.

VTE Treatment
Janet was prescribed enoxaparin 60 mg subcut twice daily for management of her PE.

Given the high risk of recurrent VTE in patients with cancer, extended treatment for at least six months is recommended. LMWH has shown to be superior to warfarin in preventing recurrent VTE without differences in mortality or bleeding.

The next update will discuss the role of direct oral anticoagulants in the management of cancer-related VTE.

Useful Resources
> Prophylaxis of venous thromboembolism (VTE) in multiple myeloma (eviQ)

For more information
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