Audit of VTE prophylaxis risk assessment and prescribing for general medical inpatients

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Abstract

Venous thromboembolism is a significant cause of morbidity and mortality amongst hospitalised patients. The aim was to review the current level of completeness of venous thromboembolism (VTE) prophylaxis risk assessment documentation at Surrey and Sussex Healthcare NHS Trust. The VTE prophylaxis risk assessment form is provided on Cerner and all doctors are prompted to complete this when opening a patient record. The risk assessment pro forma ensures that all patients who are assessed as either at moderate or high risk of VTE during their admission receive pharmacological VTE prophylaxis or if contraindicated mechanical prophylaxis. Using the Trusts thromboprophylaxis guideline, six standards were defined. The target for each standard is set at 100% and complies with national audit standards for preventing hospital acquired VTE and PE. Results are shown further in the text:

Ninety three per cent of admissions had documented assessments on admission to hospital. 0.03% had VTE risk reassessed within 24 hours and some of these patients would have gone to other wards first, 12.5% had 24 h reassessment documented which did not meet national targets. Limitations faced included: limited timeframe of data collection, small sample size and prophylaxis could have been prescribed, but the clinician had not recorded the assessment on the electronic record (Cerner). These findings have been presented to our local general internal medicine department. We plan to reaudit VTE compliance on another GIM ward. We expect findings to be similar; therefore we plan to implement a change to improve compliance rates to the national standard. We will then reaudit within 6 months to see if we have improved. I’m looking forward to the results!

Keywords: venous thromboembolism; thromboprophylaxis; anticoagulation; VTE; hospital acquired; PE; DVT

The prognostic utility of temporalis thickness measured on MRI scans in patients with intra-axial malignant brain tumours: a systematic review and meta-analysis

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Abstract

Sarcopenia is associated with worsened outcomes in solid cancers [1]. Temporalis muscle thickness (TMT) has emerged as a measure of sarcopenia [2]. Hence, this study aims to evaluate the relationship between TMT and outcome measures in patients with malignant intra-axial neoplasms. We searched Medline, Embase, Scopus, and Cochrane databases for relevant studies. Event ratios with 95% confidence intervals (CI) were analysed using the RevMan 5.4 software. Where meta-analysis was impossible, vote
counting was used to determine the effect of TMT on outcomes. The GRADE framework was used to determine the certainty of the evidence.

Four outcomes were reported for three conditions across 17 studies involving 4430 patients. Glioblastoma: thicker TMT was protective for overall survival (OS) (HR 0.59; 95% CI 0.46–0.76) (GRADE low), progression free survival (PFS) (HR 0.40; 95% CI 0.26–0.62) (GRADE high), and early discontinuation of treatment (OR 0.408; 95% CI 0.168–0.989) (GRADE high); there was no association with complications (HR 0.82; 95% CI 0.60–1.10) (GRADE low). Brain Metastases: thicker TMT was protective for OS (HR 0.73; 95% CI 0.67–0.78) (GRADE moderate); there was no association with PFS (GRADE low). Primary CNS lymphoma: TMT was protective for overall survival (HR 0.34; 95% CI 0.19–0.60) (GRADE moderate) and progression free survival (HR 0.23; 95% CI 0.09–0.56) (GRADE high).

Across various intracranial intra-axial malignancies, patients with thicker TMT have better survival outcomes and are less prone to discontinuing treatment secondary to drug toxicity. TMT has the potential to be a valuable prognostic tool for risk-benefit considerations in the management of these patients.

Keywords: temporalis thickness; MRI scan; brain tumours; systematic review; malignant; neurosurgery

References