

negative predictive value for COVID-19 of 100%, two greens 98% and three reds a positive predictive value for COVID-19 of 44%.

Results/Conclusions This diagnostic aide was applied from August 2020 within the Trust Emergency Departments and Acute Medical Units to aide cohort decisions. A retrospective application to all 213 patients with positive swabs admitted from August to November 2020 demonstrated that 69% were highlighted as at least two 'red lights' and only 1.4% were erroneously highlighted as three 'green lights'. The aide is an example of a rapidly developed evidence based tool and, particularly if updated with data from other centres, could be widely employed in low-resource healthcare settings.

875

DOES FIBRINOGEN CONCENTRATE IMPROVE OUTCOMES IN MAJOR TRAUMATIC HAEMORRHAGE? A SYSTEMATIC REVIEW

¹David Bentley, ²Alena Bentley, ³Susan Brundage, ⁴Jacqueline Rappoport. ¹Royal Sussex County Hospital, Brighton; ²St Richards Hospital; ³Shock Trauma, Baltimore; ⁴

10.1136/emered-2022-RCEM.35

Background Acute traumatic coagulopathy (ATC) is present in a quarter of severely injured patients and is associated with worse outcomes.(1–3) Fibrinogen is the first clotting protein to become deficient in ATC and there is a suggestion that supplementary fibrinogen may improve outcomes in these patients.(1, 4, 5) This review aimed to explore the efficacy and safety profile of fibrinogen concentrate (FC) administration to patients suffering from traumatic haemorrhage.

Methods A comprehensive search of Medline, Embase and the Cochrane Library databases was performed. Studies were included if they compared FC administration with a suitable comparator group in adults suffering from traumatic haemorrhage. Only randomised controlled trials, quasi-experimental or cohort studies were included at the screening stage. Included papers were analysed by narrative review.

Results 271 studies were identified and screened of which 8 were included. Mortality data was conflicting and of poor overall quality. Four of the studies reported a survival benefit with FC administration,(6–9) one reported a higher ICU mortality,(10) and the remaining studies found no significant difference relative to the comparators.(11, 12) All studies exploring the effect of FC on plasma fibrinogen levels found a significant increase to normal levels in the FC group at 2 hours post intervention.(11–13) One study demonstrated that this effect lasted for twelve hours after receiving FC.(11) There was no increase in the incidence of thromboembolic events in patients treated with FC compared to standard care.

Conclusion FC is effective at reversing hypofibrinogenaemia in the setting of ATC and does not appear to increase the risk of thromboembolic events. Mortality data remains conflicted and of poor overall quality, therefore it is unclear if these affects correspond to improved clinical outcomes. Randomised controlled trials adequately powered to detect a mortality difference are recommended before the clinical efficacy of FC in traumatic haemorrhage can be established.

1023

IMPROVING DIAGNOSIS AND APPROPRIATE SPECIALTY REFERRAL WITH A SYNCOPE PATHWAY

¹Richard Biggers, ²Aidan McIvor, ²Matthew J Reed, ²Ishwinder Thethy, ³Martyna Wojtowicz. ¹St John's Hospital Livingston and Western General Edinburgh; ²Royal Infirmary of Edinburgh; ³University of Edinburgh

10.1136/emered-2022-RCEM.36

Aims/Objectives/Background Syncope is a common presentation to ED. Patients with an underlying cardiac cause have increased risk of adverse outcome. Initially, aetiology can be unclear leading to high admission rates and associated costs. In August 2018, a syncope pathway was introduced at the Royal Infirmary of Edinburgh (RIE) ED to aid diagnosis and direct patients to appropriate services. Our aim was to assess the impact of this pathway on syncope diagnosis, admission rates, patient outcomes and specialty input.

Methods/Design A search of electronic patient records (EPR) eight months before and after the pathway's introduction was conducted to identify patients presenting with 'fainting episode +/- loss of consciousness'. EPR's were reviewed and non-syncope presentations excluded. Two reviewers consecutively sampled from both groups. Remaining patients had their EPR's scrutinised to determine history, examination findings, immediate and 1-year outcomes and referrals to specialities.

Results/Conclusions Our search identified 1055 pre-pathway and 1073 post-pathway patients. Following exclusion of non-syncope diagnoses, 673 patients remained in the pre-pathway group and 480 in the post-pathway group. Consecutive sampling from these groups generated 199 patients pre-pathway and 102 patients post-pathway with a median age of 65 (range 13–100).

A greater proportion of patients were admitted or referred to outpatient services following the pathway's introduction (46.1% versus 30.2%). Of these, 25.5% were referred to outpatient clinics compared to 20% pre-pathway. Of those admitted, 77.1% received specialty input related to their syncope compared to 25% in the pre-pathway group. After 1-year follow-up, 8.8% of patients had alternative diagnoses for their syncope compared to 2.5% pre-pathway. Post pathway, there were two syncope related deaths – both situational syncope causing falls.

Following the introduction of our syncope pathway there was no significant reduction in unscheduled care admissions. However, we have seen more specialty input and improved diagnosis with importantly, no significant increase in syncope related deaths.

766

HOW EMERGENCY PHYSICIANS MAKE THEIR CAREERS SUSTAINABLE ON THE SHOP-FLOOR AND AWAY FROM IT: RESULTS FROM AN ETHNOGRAPHIC AND INTERVIEW-BASED STUDY

Daniel Darbyshire. Salford Royal Hospital and Lancaster University

10.1136/emered-2022-RCEM.37

Aims/Objectives/Background This study aims to understand how emergency physicians work sustainably in an increasingly challenging environment in the context of a retention crisis across all grades of emergency physician.