

FMC, 441.1 PLC and 705.1 from RGH. The annual FT bed hours for patients with non-admitted back pain (FT bed to time of discharge) was 2144.3 hours from FMC, 3367.9 from PLC and 1134.9 from RGH.

Conclusion: The efficiency of FT is based on streamlining low acuity patients with an expected rapid discharge from hospital. The results of this investigation will be presented to the FT-Minor Treatment Sub-committee in order to utilize current admission rates, patient profiles, and aggregate LOS to potentially improve throughput.

Keywords: quality improvement, fast track, emergency medicine

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Characterizing spontaneous improvements in vasovagal syncope

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Introduction: Syncope is responsible for up to 5% of emergency department visits. Vasovagal syncope (VVS) is the most common subtype and can have significant quality of life implications as it is often recurrent. Clinicians treating VVS have limited treatment options available to them and often struggle with prognostication. The aim of our study was to identify patient-specific determinants of VVS improvement or cessation. **Methods:** Patients (pts) from the Prevention of Syncope Trials (POST) 1 and 2 were included in this study. All patients had VVS according to tilt table testing or a diagnostic point score. Patients had fainted ≥ 1 time in the previous year and all were followed for up to 1 year after enrollment. Data are presented as median (IQR). Complete responders (CR) did not faint in follow-up; partial responders (PR) fainted ≥ 1 /year less than prior year but did not stop; and non-responders (NR) did not improve or stop. **Results:** There were 392 patients: 126 males, median age 34 (23,50) who had fainted for 10 (3,22) years and followed for a median of 363 (148,376) days. There were 225 CR (57%), 120 PR (31%) and 47 NR (12%). PR subjects were younger: 27 (24,33) years compared to CR (36 (32,42)) years and NR (36 (29,47)) years ($p < 0.05$). Receiver operator characteristic analysis showed age predicted PR (AUC = 0.62). Lifetime fainting frequency was 0.67 (0.14,2.00) faints per year, increasing to 4 (2,10) faints in the pre-year and decreasing to 0 (0,1.9) faints in the post-year ($p < 0.0001$). Pts had similar syncope frequency in the distant past (PR, 1.14 faints/year; CR, 0.68 faints/year; NR, 0.58 faints/year) but PR pts worsened markedly prior to enrollment. PR subjects fainted much more in the prior year: 10 (6,18) faints compared CR (3 (2,3) faints, $p < 0.0001$) and NR (2 (2,4) faints, $p < 0.05$). Receiver operator characteristic analysis showed prior year faints predicted PR well (AUC = 0.81). There was no significant interaction with treatment (metoprolol in POST 1, fludrocortisone in POST 2). **Conclusion:** After specialist consultation, 57% of VVS patients stop fainting and 31% improve incompletely without a significant treatment effect. Patients who will improve incompletely can be accurately selected based on younger age and more frequent syncope. Older patients with less frequent syncope are 83% likely to stop fainting. These findings will help counsel pts and select candidates for medical therapy.

Keywords: syncope, prognosis, decision tool

P110

Acute mountain sickness in the Himalayas: preliminary report

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Introduction: Acute Mountain Sickness (AMS) is a high-altitude medical emergency that requires prompt treatment. If left untreated AMS can progress to high-altitude cerebral edema or pulmonary edema,

both of which can be fatal. As the popularity of high altitude trekking increases in the Himalayas we were interested in determining what rates of AMS are on popular routes in this region. **Methods:** AMS was diagnosed using a standardized Lake Louise Symptom Score (LLSS) where scores 3-5 denoted mild AMS and >5 denoted severe AMS. Forms were distributed to trekkers prior to departure and symptoms scores were determined daily. Data on medical history and patient demographics were also collected. All data are expressed as mean \pm SEM. **Results:** Preliminary results are reported from N = 17 (4 female) participants. Mean age was 43.7 ± 3.9 y. Most subjects, 68.8%, had trekked above 2500m in the past. Only 6.25% reported having no knowledge of AMS, with the others having limited or expert knowledge. 25% of subjects had previously suffered from AMS. Most subjects, 82.4%, took prophylactic AMS medication, acetazolamide; at a dose of 250 mg/d. Subjects trekked at a mean altitude of 3650 ± 85 m and ascended to a maximum altitude of 5012 ± 103 m. The mean LLSS was 1.48 ± 0.31 with a maximal LLSS of 4.76 ± 0.75 . Within our sample, 70.86% suffered from AMS at some point during their trek. Of those who suffered from AMS, the mean number of days affected was 3.17 ± 0.61 , and of those with severe AMS, mean number of days affected was 2.14 ± 0.7 . **Conclusion:** Over 70% of trekkers to the Himalayas experience AMS for an average of 3d, despite the use of prophylactic medication that most participants take. Almost 95% of trekkers have working knowledge of AMS and most have prior experience trekking at high-altitude. Given the dangers of high altitude trekking, pre-departure education for patients, especially those with chronic diseases, alongside prophylactic medication for AMS may help mitigate the risk.

Keywords: altitude medicine, acute mountain sickness

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The social determinants of health in adults presenting to the ED with a mental health complaint

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Introduction: The social determinants of health (SDoH) can play a significant role in a person's overall wellbeing. This is especially true for adults with mental illness and mental health disorders. In this study, we describe the SDoH of patients presenting to an academic, inner-city emergency department (ED) with an acute mental health complaint (AMHC). **Methods:** We prospectively identified and enrolled a convenience sample of patients presenting to an ED with an annual census of 85,000 visits. Participants provided informed written consent, and completed a questionnaire package containing questions related to demographics and SDoH. As well, participants were asked to complete four mental health, quality of life, and recovery validated patient-reported outcome measures. **Results:** A total 108 participants were enrolled in this study, of which 65% were male, aged 37.5 years (IQR 26.7-50.3), 56% Caucasian, and 22% Aboriginal. Depression was the primary diagnosis reported by 55% of participants, with 58.9% meeting the PhQ-9 cutoff for moderate-severe depression. The highest level of educational achievement for 44% of participants was high school or less, with 75% reporting being unemployed. Almost half (45%) reported engaging in less than two hours of structured activity each week. Thirty eight percent of participants reported living in their own apartment, with 25% reporting being homeless and 17% living in a single-room housing unit. The majority of participants (56%) sampled were not satisfied with their housing, and 67% were actively looking for new housing. Sixty percent of participants reported smoking cigarettes daily and 40% reported weekly cannabis use. A total of