

at six months in one RCT, but not at five years in a prospective comparison study. Function improved in two different RCT's with NTG patch use at 0.72mg/24h and 1.25mg/24h when compared to placebo. Five years after cessation of treatment, there was no difference between NTG patch and placebo. **Conclusion:** Overall, the included studies demonstrate that the use of NTG patches compared to placebo improves short term and long term pain relief, as well as elbow function. However, more studies are required to bridge the gaps between the existing studies and reduce heterogeneity between the study designs.

**Keywords:** lateral epicondylitis, nitroglycerin

#### MP020

##### **Do real-time Twitter metrics correlate with traditional emergency medicine post-conference speaker evaluations?**

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**Introduction:** Traditional post-conference speaker evaluations are inconsistently completed; meanwhile, real time social media tools such as Twitter are increasingly used in conferences. We sought to determine whether a correlation exists between traditional conference evaluation for a speaker and the number of real-time tweets it generated using data from a CAEP conference. **Methods:** This study utilized a retrospective design. The hashtag #CAEP14 was prospectively registered with Symplur, an online Twitter management tool, so that all tweets related to CAEP conference 2014 were stored. A tweet was associated with a session if it mentioned the speaker name, or if the tweet content and timing closely matched that of the session in the schedule. A tweet classification system was developed to differentiate original tweets from retweets, and quotes from comments generating further discussion. Two authors assessed and coded the first 200 tweets together to ensure a uniform approach to coding, and then independently coded the remaining tweets. Discrepancies were resolved by consensus. One author reviewed post-conference speaker evaluation, and abstracted the value corresponding to the question "The speaker was an effective communicator". We present descriptive statistics and correlation analyses. **Results:** A total of 3,804 tweets were collected, with 2,218 (58.3%) associated with a session. Forty-eight (48%) (131 out of 274) of sessions receiving at least one tweet, with a mean of 11.7 tweets per session (95% CI of 0 to 57.5). In comparison, only 31% (85 out of 274) of sessions received a formal post conference speaker evaluation ( $p < 0.005$ ). For sessions that received at least one traditional post-conference evaluation, there was no significant correlation between the number of tweets and evaluation scores ( $R = 0.087$ ). This can be attributed to the fact that there was minimal variation between evaluation scores (median = 3.6 out of 5, IQR of 3.4 to 3.7). **Conclusion:** There was no correlation between the number of real-time tweets and traditional post-conference speaker evaluation. However, many sessions which received no formal speaker evaluation generated tweets, and the number of tweets was highly variable between sessions. Thus, Twitter metrics might be useful for conference organizers to supplement formal speaker evaluations. **Keywords:** social media, altmetrics, program evaluation

#### MP021

##### **Contributing factors and time delays in management of difficult airways in the emergency department - a retrospective analysis**

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**Introduction:** Delays in definitive management of difficult airways in the Emergency Department (ED), often involving coordination with

expert consultation from Anesthesia and/or Otolaryngology, can lead to devastating outcomes. Currently at our ED there is no standardized approach to identifying and/or managing predicted difficult airway scenarios. We sought to determine the most common factors contributing to predicted difficult airways in the ED, and areas of time delays in securing a definitive airway. **Methods:** We conducted a retrospective analysis at a tertiary academic centre (>160,000 ED visits/yr) over a 5 year period. A research assistant screened all cases of "Stat" pages from the ED to the Anesthesia service. An ED clinician performed a thorough review of the charts to confirm difficult airway cases. A single reviewer extracted data on patient demographics, factors associated with a difficult airway, and specific time intervals throughout a patient's clinical course. We present descriptive statistics with 95%CI. **Results:** 45 cases met our inclusion criteria between Jan 2010-Dec 2014. 16 were excluded and a total of 29 cases of difficulty airways in the ED were included in our final analysis. The average age was 56.7 (95% CI 50.1-63.4) years, and 68.9% were male. The most common factors contributing to difficult airway included: Obesity (48.2%), previous history of head/neck malignancy/radiation (27.6%), and facial edema (20.7%). 25 (86.2%) required expert assistance from Anesthesia/Otolaryngology for definitive airway, and 8 (27.6%) survived to hospital discharge. The mean time between decision to intubate and "Stat" anesthesia page was 14.0 (95% CI 8.7-19.3) mins. The mean time from "Stat" anesthesia page to arrival of anesthesia MD was 8.4 (95% CI 6.0-10.7) mins. The mean time between arrival of anesthesia MD and definitive airway was 12.1 (95% CI 7.4-16.8) mins. The mean time between decision to intubate and definitive airway was 35.5 (95% CI 27.9-43.1) mins. **Conclusion:** We found a number of common factors contributing to a patient's risk of having a predicted difficult airway in the ED, as well as areas of significant time delays in the unstandardized, multidisciplinary management of these cases. Future work is needed on developing, implementing, and evaluating more standardized difficult airway response protocols in the ED.

**Keywords:** difficult airway, anesthesia, quality improvement

#### MP022

##### **Anticoagulation use in patients with atrial fibrillation/flutter in Canadian emergency departments since the introduction of the novel anticoagulants**

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**Introduction:** Despite strong evidence that antithrombotic drugs in atrial fibrillation/flutter (AF) patients reduce stroke risk, previous emergency department (ED) pre-novel anticoagulant (NOAC) studies have shown that most discharged patients are not optimally treated. This study sought to determine baseline antithrombotic management in AF patients, and appropriate antithrombotic prescription upon ED discharge since the introduction of NOACs. **Methods:** Consecutive AF patients discharged by the ED physician from three academic EDs in Toronto, Canada were retrospectively identified using ECG data. Primary AF was defined as AF in patients  $\geq 18$  years without congenital heart disease or other acute medical conditions. All management and disposition decisions were left to the discretion of the emergency doctor. **Results:** From July 2012 to October 2014, 691 patients with primary AF were identified. Of these, 34.4% ( $n = 238$ ) had new onset AF and 66.4% ( $n = 459$ ) were discharged home directly from the ED. Of those with previously known AF ( $n = 453$ ), 44.2% ( $n = 200$ ) were on anticoagulation at ED arrival (warfarin 59.5%, dabigatran 23.0%, rivaroxaban 11.5%); 25.6% ( $n = 116$ ) on antiplatelets, and 29 (6.4%) on both.