

via set questionnaire focusing on quality of care received by the patient. Results: Among the 30 patients who were included in our analysis, 7 were females and the average age in our cohort was found to be 72.8. In about 56% of the patients, there was no clear indication mentioned in the clinical notes regarding continuation/discontinuation of telemetry. Based on proposed indication, about 36.66% (11 patients out of which 2 were female) were identified to be at significant risk of an immediate life-threatening arrhythmia (Class I). Among this group, 2 patients were reported to have significant arrhythmia event necessitating treatment. Further analysis revealed that from our cohort, 46.66% (14 patients) had a Class II indication for their telemetry monitoring out of which only 2 patients had a significant event recorded. However, only 16.66% (5 patients) were found to meet the eligibility for Class III indications and none of them encountered a significant arrhythmia. From anonymously filled patient questionnaires, around two-third of the patients reported not being informed about the utility of telemetry and its predicted duration of stay. One-third of patients reported the device to be inconvenient, intrusive and heavy.

Conclusions To accomplish a sustainable improvement, a patient-centred approach should be exercised to help identify the gaps in quality of care delivered. Our analysis showed that significant number of patients received telemetry when it was not clinically indicated. The proposed interventions include adopting formal request process for telemetry, predicting its duration, use of patient education tools and exploring compatibility of telemetry device used. Larger scale studies are required to gain more insight into the appropriateness and impact of telemetry in a hospital setting.

Conflict of Interest None

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EFFICACY OF VASOPRESSIN, STEROID, AND EPINEPHRINE PROTOCOL FOR IN-HOSPITAL CARDIAC ARREST RESUSCITATION: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS WITH TRIAL SEQUENTIAL ANALYSIS

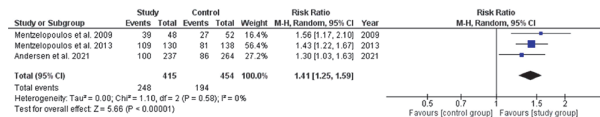
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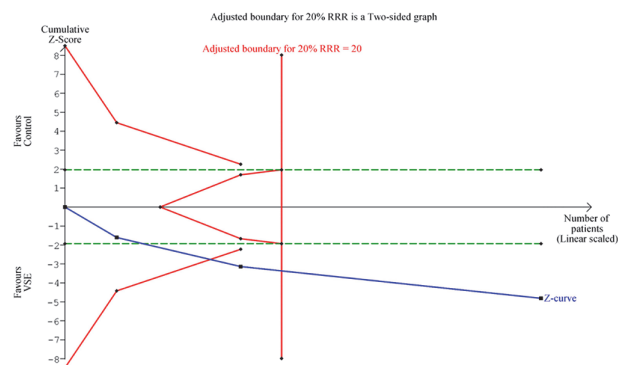
Objectives To assess the effect of vasopressin, steroid and epinephrine (VSE) combination therapy on return of spontaneous circulation (ROSC) after in-hospital cardiac arrest (IHCA), and test the conclusiveness of evidence using trial sequential analysis (TSA).

Methods The systematic search included PubMed, EMBASE, Scopus, and Cochrane Central Register of Controlled Trials. Randomized controlled trials (RCTs) that included adult patients with IHCA, with at least one group receiving combined VSE therapy were selected. Data was extracted independently by two reviewers. The main outcome of interest was ROSC. Other outcomes included survival to hospital discharge or survival to 30 and 90 days, with good neurological outcomes.

Results We included a total of three RCTs (n=869 patients). Results showed that VSE combination therapy increased ROSC



Abstract 100 Figure 1



Abstract 100 Figure 2

(risk ratio, 1.41; 95% CI, 1.25–1.59) as compared to placebo. TSA demonstrated that the existing evidence is conclusive. This was also validated by the alpha-spending adjusted relative risk (1.32 [1.16, 1.49], $p < 0.0001$). Other outcomes could not be meta-analysed due to differences in timeframe in the included studies.

Conclusion VSE combination therapy administered in cardiopulmonary resuscitation led to improved rates of ROSC. Future trials of VSE therapy should evaluate survival to hospital discharge, neurological function and long-term survival.

Conflict of Interest None

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CLINICAL PROFILES OF HOSPITALIZED PATIENTS DIAGNOSED WITH AF COMPARED TO THOSE DIAGNOSED IN AN AMBULATORY SETTING: ANALYSIS FROM THE JORDAN ATRIAL FIBRILLATION (JOFIB) STUDY

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Introduction Atrial fibrillation (AF) is the most prevalent sustained cardiac arrhythmia in clinical practice with a progressively increasing incidence and prevalence worldwide. Despite the prominent morbidity and mortality associated with AF, no previous studies have compared the clinical characteristics between hospitalized patients (H-pts) and ambulatory care patients (A-pts) with AF. The purpose of this cross-sectional study is to compare the epidemiology and clinical characteristics among patients with AF in both hospitalized and ambulatory settings.

Methods 2,157 consecutive adult patients newly diagnosed with AF while hospitalized or during outpatient visits in 19 hospitals and 30 outpatient cardiology clinics were enrolled in the Jordan AF study from May 2019 to January 2021. Clinical and epidemiological characteristics of H-pts at the time of enrollment were compared to the A-pts.

Results Among the 2157 pts, 628 (29.1%) of participants were H-pts at the time of enrollment, with the most common cause of hospitalization being due to AF-related morbidity (29.5%). While no statistically significant association was observed with gender, H-pts were slightly older (mean age 69.7±14.1 years vs 67.1±12.4 years, p<0.001), had a higher prevalence of diabetes (52.5% vs 40.7%, p<0.001) and dyslipidemia (51.2% vs 42.0%, p<0.001). Furthermore, they had higher prevalence of cerebrovascular accident (20.1% vs 13.6%, p=0.001), coronary artery disease (17.4% vs 8.4%, p<0.001), heart failure (31.1% vs 21.4%, p<0.001), and a left ventricular ejection fraction of <40% (16.6% vs 12.8%, p=0.02). H-pts had a significantly less prevalent valvular AF (VAF) in contrast to A-pts (4.4% vs 10.3%, p<0.001). Notably, both the CHA2DS2VASc and HAS-BLED scores were significantly higher in H-pts with a mean of 4.0±1.9 and 2.01±1.2, respectively, compared to mean scores of 3.41±1.7 and 1.51±1.1, respectively, in A-pts (p<0.001). Additionally, H-pts had a higher prevalence of high-risk CHA2DS2VASc score of ≥2 (89.2% vs 84.7%, p=0.006). Among patients with NVAf in both groups, oral anticoagulant agents (OAC) were utilized in 64.8% and 81.2% of the H-pts and A-pts groups, respectively (p<0.001). Novel OAC (NOAC) were the most commonly used OAC in patients with NVAf, accounting for 44.0% and 52.3% of H-pts and A-pts, respectively (p=0.001).

Conclusion The JoFib study demonstrated significant variability among AF patients enrolled at the time of hospitalization compared to those enrolled in an outpatient setting. H-pts were older and had more comorbidities including higher CHA2DS2VASc and HAS-BLED scores. The Utilization of OAC and NOAC was less among H-pts with NVAf compared to the A-pts group. Patients with the mentioned profile need to be identified earlier while outpatient and be given special attention and management to avoid hospitalization and AF complication.

Conflict of Interest None declared.

102 REDUCING COMORBIDITY CODING ERRORS IN THE COSTING OF ELECTIVE CARDIAC DEVICE IMPLANTS

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Introduction Payment by Results (PbR) is a system of funding hospitals according to the type and number of treatments provided, each having a nationally set average tariff. The nationally set tariff is based on healthcare resource groups (HRGs) which are mainly composed of the type of procedure performed as well as the patient's comorbidities score (CC), age, gender, complications, and length of stay. On discharge, the coding department uses this information to classify the patient's care into diagnoses (ICD-10 codes) and interventions (OPCS-4 codes). The appropriate code(s) are then used to calculate the cost of a patient's episode of care. In most hospitals, the coding team relies on comorbidity information being

entered correctly on admission and/or in clinic. (1) Comorbidities form a big part of the tariff, and an incomplete list of patient comorbidities could result in a loss of funds for that patient's episode of care. The aim of our project was to assess and improve the costing of elective cardiac device implants at Royal Papworth hospital. Method Firstly, we undertook a pilot study at Lister hospital in Sept 2019. 6 out of a total of 14 patients who underwent an elective cardiac device implant had a full list of comorbidities. 1 of these 6 patients had an incorrect CC score and as a result the trust lost £6113. The main limitation was the use of paper notes in the hospital, making extraction of CC information by the coding department difficult. (Abstract in Heart Journal, July 2020) (2) We subsequently repeated the project at Royal Papworth hospital, a tertiary centre with an electronic patient record system (EPR). We retrospectively looked at the costing of the episodes of care for 50 patients who had undergone an elective cardiac device implant in April 2020. We extracted comprehensive patient comorbidity information from the EPR as well as the summary care record (SCR) which is used by general practices. A proposed CC score and total cost for each patient's episode of care was calculated. This proposed cost was then compared to the actual CC score and cost calculated by the trust's coding/finance department. Results 23 patients had an incorrect trust CC score and consequently a total loss of £11,753. (See results table 1 below) Discussion PbR is the payment system in England under which commissioners pay healthcare providers for the treatments they provide for each patient. PbR scheme implementation has been challenging, with healthcare providers recognising the importance of training, technical support as well as the development of effective monitoring systems. (3,4) This is evidenced by the shift towards electronic patient records (EPR) which are bridging the gap between clinicians and financial coding departments. Despite the drive towards digitalisation of healthcare, there is still challenges with data flow between primary care providers, hospital trusts and individuals. We had multiple discussions with our coding to understand the difficulties in extracting patient comorbidity information from our hospital electronic system. We found that using the summary care records (SCR) from GPs was the most accurate way of coding comorbidities. More trusts are now incorporating a link to the SCRs through their EPR system, however, not all hospital coding departments have similar access as clinicians do. This was the main limitation in implementing our recommendations. We addressed this by requesting access to SCR for our coding department, increasing junior doctor awareness of SCR and

Abstract 102 Table 1 Table showing funding loss per type of procedure

Type of procedure (as per National tariff)	Number of patients	Trust CC score	Proposed CC score (Range)	Total loss
Implantation of Single-Chamber Pacemaker with CC Score 0-2	8	0-2	3-5	£2,003
	6	0-2	6-8	£4,426
Implantation of Single-Chamber Pacemaker with CC Score 3-5	1	3-5	6	£557
	1	3-5	11	£932
Implantation of Dual-Chamber Pacemaker with CC Score 0-2	3	0-2	3	£543
	1	0-2	6	£739
Implantation of Cardioverter Defibrillator with CC Score 0-8	3	0-8	9-12	£2,729
Total Loss	23			£11,753

CC – complexity and comorbidity score
Trust CC score – score calculated by our coding department
Proposed score – score calculated by us 'clinicians' using the GP summary care records (SCR)