

Methods This clinical audit examined patients who had been administered morphine by EMAS staff. Inclusion criteria were patients who had received documented oral, intravenous or intramuscular morphine within a three-month period. Those who declined morphine were excluded. Data extracted from the patient report forms included: patient demographics; documented PSs; morphine doses and routes; adjunct analgesics and use of anti-emetics. This information was used to determine how appropriately PSs, analgesic adjuncts and anti-emetics were being used alongside morphine.

Results There were 293 patients included in the audit. 205 (70.0%) had a PS documented before and after morphine administration; 50 (17.1%) had one documented PS and 38 (13.0%) had none. 58 (19.8%) patients received ENTONOX before the administration of morphine and 17 (5.8%) received it after morphine. 218 (74.4%) had no record of ENTONOX administration and only 100 (34.1%) patients were prescribed an anti-emetic with morphine.

Conclusion There is potential for improved adherence to JRCALC guidelines through increased awareness and education. We will trial this at EMAS through staff notices followed by a re-audit in 4–6 months. Ideally, audits within other ambulance services with more patients would be undertaken for widespread quality improvement.

REFERENCE

1. Joint Royal Colleges Ambulance Liaison Committee and Association of Ambulance Chief Executives (2016). UK Ambulance Services Clinical Practice Guidelines 2016. Bridgwater: Class Professional Publishing.

Conflict of interest None declared.

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10 PREHOSPITAL CRITICAL CARE TEAM ATTENDANCE INCREASES THE SURVIVAL OF MAJOR TRAUMA PATIENTS: NATIONAL REGISTRY DATA

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Aim To investigate the effect of prehospital critical care team attendance, versus usual ambulance care, on trauma patient mortality.

Methods We retrospectively examined data from the Scottish Trauma Audit Group for the calendar years 2011–14, covering all trauma patients admitted to hospital in Scotland. We divided them into two groups: those who were seen by a prehospital critical care team; and those who received standard ambulance care only. We compared expected mortality (by TRISS and PS12 models) with observed mortality within each group, with subanalysis of major trauma patients (Injury Severity Score >15).

Results 10 252 patients were available for analysis. Of these, 503 (4.9%) were seen by a prehospital critical care team and 9749 (95.1%) received standard ambulance care. There was a non significant increase in excess survivors (0.9/100 patients) in the group who received critical care ($p=0.58$). 1545 major trauma patients were available for analysis. Of these, 210 (13.6%) were seen by a prehospital critical care team and 1335 (86.4%) received standard ambulance care. There was a significant increase in excess survivors (4.5/100 patients) in major trauma patients who received critical care ($p=0.03$).

Conclusion In major trauma patients in Scotland, the addition of prehospital critical care to standard ambulance care results in an increase in patient survival. This study adds to the growing body of evidence supporting the utility of prehospital critical care, especially in the most severely injured patients.

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11 INCREASE IN BYSTANDER-CPR IN SWEDEN IS ASSOCIATED WITH INCREASED RATES OF COMPRESSION-ONLY CPR

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Aim To describe changes in rate of CPR, Compression Only CPR (CO-CPR), and 30-day survival over 3 different time-periods of CPR guidelines in Sweden. We hypothesised that increased use of CO-CPR would be associated with increased CPR-rates and similar survival compared to standard CPR.

Methods Registry based cohort study including all bystander witnessed cases of out-of-hospital cardiac arrests reported to the Swedish register for cardio-pulmonary resuscitation in 2000–2014. Exposure was categorised as bystander CPR or No-CPR. Bystander CPR was further categorised into Standard CPR with rescue breathing and ventilation (S-CPR) or CO-CPR. Primary outcome was 30 day survival.

Results 23620 patients were included. Total rates of bystander CPR increased from 36% in 2000 to 68% in 2014. S-CPR increased from 31% in 2000 to 38% in 2014. CO-CPR increased from 5% in 2000 to 30% 2014. Overall, there was no significant difference in survival among patients receiving CO-CPR or S-CPR (13.6% vs. 12.9% $p=0.3$).

Conclusion Increase in bystander CPR during the last 15 years in Sweden was associated with an increase in CO-CPR. Overall 30 day survival was not different when comparing CO-CPR to S-CPR.

Conflict of interest None declared.

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