

December 2011. Hospital records were reviewed. Vital signs, apnea and seizure events, need for respiratory support, infection rates, amount of feedings, gastric residuals were investigated. Descriptive statistics and one way Anova test were applied.

Results Seventy ROP examinations in 34 infants were included. Mean birth weight was 1157 ± 256 (700–1945) g, mean gestational age was 28 ± 1.6 (25–32) weeks. Median duration of mechanical support was 15.1 ± 12 (0–50) days. Mean heart rate, respiratory rate and oxygen saturation were similar 24 hours before and after examination. There were no significant differences in apnea event and seizures. Gastric distention was seen in three babies, suspected necrotising enterocolitis in one infant.

Conclusions There were no demonstrable systemic effects associated with ROP examination although infants seemed to be somewhat tired. Low incidence of severe systemic side effects may be associated with fingertip pressure on lacrimal duct and reducing the amount of feedings just before and after the examination.

1611 THE COMORBIDITY OF CHRONIC PAIN AND INSOMNIA IN A COMMUNITY ADOLESCENT SAMPLE: PREVALENCE AND ASSOCIATION WITH SOCIODEMOGRAPHIC AND PSYCHOSOCIAL FACTORS

doi:10.1136/archdischild-2012-302724.1611

¹WS Wong, ¹N Siu, ²C Wong. ¹Department of Psychological Studies, The Hong Kong Institute of Education; ²Department of Applied Social Studies, City University of Hong Kong, Hong Kong, Hong Kong S.A.R.

Background and Aims The comorbidity of chronic pain and insomnia has received increasing research attention in Western clinical pediatric populations; yet, little is known about its sociodemographic and psychological correlates in non-Western community pediatric populations. This study aimed to examine the prevalence of comorbid chronic pain and insomnia and its associated factors in a community sample of Chinese adolescents.

Methods A total of 1,518 adolescents aged from 11–19 years participated in this school-based study. Apart from sociodemographic background, participants were assessed on chronic pain, insomnia, depression, perceived stress, and social support. Prevalence of co-occurrence of chronic pain and insomnia was determined. Subjects with single symptom were compared with those with symptom co-occurrence on pain characteristics and sleep patterns. Multiple regression model evaluated factors associated with symptom comorbidity.

Results The prevalence of comorbid chronic pain and insomnia was 19.1% (95% CI: 16.9, 21.4). Fully adjusted stepwise regression analyses identified being female, more depressive symptoms, and higher perceived stress to be significantly associated with comorbid symptoms. Adolescents with both symptoms reported significantly more pain sites, higher worst pain, and higher pain-associated interference than those reported chronic pain only. Subjects with comorbid symptoms also had poorer subjective sleep quality, greater sleep disturbances, and more daytime dysfunction than those reported insomnia only.

Conclusions Our data offered preliminary evidence that comorbid chronic pain and insomnia occurred among about one-fifth in the present sample of Chinese community adolescents.

1612 PREMEDICATION FOR NEONATAL INTUBATION: CURRENT PRACTICE IN SAUDI ARABIA

doi:10.1136/archdischild-2012-302724.1612

^{1,2}R Mosalli, ³K Al Faleh, ⁴B Paes. ¹Umm Al Qura University, Mecca; ²Department of Pediatrics, International Medical Center, Jeddah; ³Department of Pediatrics (Neonatal Division), King Saud University, Riyadh, Saudi Arabia; ⁴Department of Pediatrics (Neonatal Division), McMaster University, Hamilton, ON, Canada

Objective Despite strong evidence of the benefits of rapid sequence intubation in neonates, it is still infrequently utilized in neonatal intensive care units (NICU), contributing to avoidable pain and secondary procedure-related physiological disturbances.

Aim of the study was to assess the practice of premedication, regimens commonly used before elective endotracheal intubation and neonatologists attitudes regarding this intervention in institutions across Saudi Arabia and to develop evidence based recommendations.

Methods A web based, structured questionnaire was constructed to assess the use of premedication for elective endotracheal intubation and determine barriers to the procedure. The questionnaire was distributed via e-mail to neonatal specialists and consultants of 10 NICUs.

Results 68 (85%) of the clinicians responded to the survey. Most respondents were NICU consultants. Although 48 of the 68 responding physicians (70%) believed it was essential to routinely use premedication for all elective intubations, only 28 (41%) implemented this strategy. Fear of potential side effects was the most frequently cited reason for avoiding premedication. Treatment regimens varied widely among respondents.

Conclusion Rates of premedication prior to non-emergent intubation in neonates are suboptimal. Flawed information and lack of unified unit policy hampered effective implementation. Development of evidence based guideline may support country-wide adoption of this practice.

1613 MANAGEMENT OF VASO-OCCLUSIVE CRISIS WITH PATIENT CONTROLLED ANALGESIA

doi:10.1136/archdischild-2012-302724.1613

¹JL Wayenberg, ²F De Pooter, ³S Redant, ¹J Fontaine, ⁴L Dedeken, ⁴S Huybrechts, ⁴PQ Le, ⁴C Heijmans, ⁴M Ngalula Mujinga, ⁴A Ferster. ¹Pain Ressource Unit, Department of Pediatrics; ²Anesthesiology; ³Emergency Unit, Department of Pediatrics; ⁴Hemato-Oncology Unit, Department of Pediatrics, Hopital Universitaire des Enfants - Reine Fabiola (Université Libre de Bruxelles), Brussels, Belgium

Pain resulting from sickle-cell vaso-occlusive crisis (VOC) is often severe, prolonged and difficult to alleviate. Guidelines based on scientific evidence are lacking. In order to evaluate the effectiveness of our treatment protocol, we performed a population-based retrospective observational study on HbSS sickle-cell patients (n=22) admitted for severe VOC (n=48) during a 30-months period and managed with patient controlled analgesia (PCA).

Median (10th-90th percentiles) visual analogical pain scale (VAS) at admission was 9.5(7–10). Patient received 0.3mg/kg (0.1–0.4) intravenous morphine at admission, then PCA was started with the following settings: continuous rate: 20 µg/kg/h (10–25), bolus: 25µg/kg (21–32), and 1.8 bolus allowed/hour (1.7–2.8). Six hours after admission, VAS was less than 7 in only 41% of cases. The median VAS declined steadily during hospitalization. Pain intensity was not correlated with morphine dosage. Success 6 hours after admission (VAS < 7) and during hospitalization (VAS ≤ 4) was associated with significantly lower VAS score at admission and lower number of VOC during the study period. Patients who experienced >2 CVO/year have the following characteristics: higher VAS at admission, higher morphine dosages, lower success rate and lower CRP, bilirubin, LDH and reticulocyte count.

The difficulties encountered in the management of patients who experienced >2 VOC/year may be related to their genotypic particularities. For such patients, an increase of morphine dosage is required. We have developed a computer routine in order to reduce time and increase accuracy of PCA prescription, and to build a prospective database that enables continuous assessment of our treatment protocol.