

199. ACUTE KIDNEY INJURY FOLLOWING CARDIOPULMONARY BYPASS IN CHILDREN

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Introduction. Acute kidney injury (AKI) is the most common and most serious complication following heart surgery.

Aim of the study. To determine the prevalence of, and risk factors for, AKI following pediatric cardiac surgery.

Materials and methods. We retrospectively analyzed 203 patients aged ≤ 18 years who underwent cardiac surgery for congenital heart defects; by RACHS-1 category, 41 patients (43%) had an operative risk score ≥ 3 . AKI was defined and classified using the pediatric pRIFLE criteria (Pediatric Risk, Injury, Failure, Loss, and End-stage Kidney Disease).

Results. 58 patients (28.6%) developed AKI: 40 had AKI with a severity classified as risk (R), 14 had AKI classified as injury (I) and 4 had AKI classified as injury (F). RACHS-1 (Risk-Adjusted classification for Congenital Heart Surgery) category, fluid administration as well as fluid overload were compared between patients with and without AKI. Longer cardiopulmonary bypass (CPB) time ($P=0.03$) and vasoactive-inotropic score ($P=0.0002$) were independent risk factors for AKI. Fluid overload and intraoperative lactate level was not a significant predictor for AKI. Higher pRIFLE classification positively correlated with increased postoperative mechanical ventilation duration, and longer ICU stay ($P=0.01$).

Conclusions. In this study, we found a higher prevalence of postoperative AKI in pediatric patients undergoing severe cardiac surgery. AKI was associated with worse early postoperative outcomes. Early prediction and appropriate treatment of AKI during the postoperative period are emphasized.

Key words: kidney injury, cardiopulmonary bypass

200. IMPACT ON MORTALITY OF RESPIRATORY EVENTS AND VENTILATION ASSOCIATED PNEUMONIA, RETROSPECTIVE DESCRIPTIVE PILOT STUDY

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Introduction. Ventilator-associated pneumonia (VAP) remains a dangerous source of morbidity, mortality and it is associated with increased duration of ventilation, intensive care unit (ICU) stay, hospital stay, and cost for healthcare. Clinical pulmonary infection score (CPIS) can be utilized tentatively to determination VAP, to start early treatment and avert mortality. Prospectively accumulated data was retrospectively analyzed from Emergency Institute database HIPOCRATE of hospitalized ICU patients over a year time frame.

Aim of the study. The objective of this study is (1) to assess the potential competency of a screening test based on the CPIS to identify and treat patients with VAP; (2) to evaluate risk factors and outcomes associated with VAP.

Materials and methods. A retrospective descriptive study was performed including 108 patients supported by mechanical ventilation for more than 48 hours between 18 and 80 years old admitted to the ICU in Emergency Institute. Statistic information of the patients, the duration of

mechanical ventilation, length of the ICU stay and results (survival or death) were analyzed. The CPIS was calculated after 48 hours for the diagnosis of VAP. The patients with CPIS >5 intubated were assessed VAP+ and the others with CPIS ≤5 were evaluated VAP-. Statistics: t-Student, Fisher exact test.

Results. VAP (77.77%), deceased (87.77%), VAP identified using CPIS (score >5. 67.77%), reintubated patients (6.66%), the duration of mechanical ventilation and proportion of death were essentially higher in the patients with VAP+. CPIS levels were also higher in the patients with VAP+. The parameters, which included the CPIS, body temperature, leukocyte number, tracheal secretions, and the presence of infiltrates on the chest radiograph, were significantly higher in VAP+ patients.

Conclusions. The results of our research demonstrate that (1) utilizing the CPIS for early diagnosis and treatment of VAP and considering that the patients with CPIS >5 were VAP+ are managing elements to determine the issues related with VAP in ICU patients and at the meantime can confine superfluous antibiotic use. (2) VAP+ patients have longer stay-period, longer duration of mechanical ventilation, and increased risk for mortality, that recommend that the risk factors (reintubation, use of stress ulcer prophylactics and transportation) causing VAP ought to be known by medical staff, and that patient care should be handled accordingly.

Key words: VAP, CPIS, ICU, mechanical ventilation

PUBLIC HEALTH

201. EVALUATING THE RISK OF MEDICAL CARE ASSOCIATED INFECTION THROUGH RAPID SELF-CONTROL TESTS

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Introduction. Infection prevention and control in medical care facilities are designed to prevent the spread of infection and ensure a safe environment for patients and health workers.

Aim of the study. To determine the risk of infection for the patients or medical staff according to the grade of contamination of the surfaces frequently touched by them.

Materials and methods. We relied on running rapid auto-control tests on surfaces that are frequently touched by patients and staff, and calculating the risk of infection based on the degree of contamination of these surfaces.

Results. We performed 48 tests: 22.91% on surgical departments and 77.08% on medical units. Of the total number of tests performed the 27.08% had values above the admitted limit. The majority of the abnormal tests were detected in surgical departments.

Conclusions. Rapid auto-control tests are quick option to indicate the grade of contamination of the surfaces frequently touched by medical staff and patients. Test results can be used for correction of the procedures of the surface cleansing and disinfection.

Key words: infection prevention, medical staff, rapid tests, surface contamination

202. THE EVALUATION OF SPORT INJURIES AND MEDICAL RECOVERY METHODS BASED ON THE SPORT AND ITS LEVEL OF PRACTICE

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