1528 UTILITY OF RESEARCH OF CARDIAC BIOMARKERS FOR EARLY DIAGNOSIS OF ANTHRACYCLINE INDUCED CARDIOTOXICITY IN CHILDREN

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Background Anthracycline-induced cardiotoxicity in children with malignant diseases often may be associated with significant changes in values of some cardiac biomarkers.

Objective To establish the value of research of cardiac biomarkers for early diagnosis of anthracycline induced cardiotoxicity.

Methods Patients, 46 children (aged 2 months - 18 years), treated with anthracyclines for malignant hemopathies. Control group: 20 healthy children without history of cardiac diseases. Patients and controls were investigated by: clinical exam, Doppler echocardiography (Echo), determination of plasma values of cardiac biomarkers BNP (B natriuretic peptide) and cTnI (troponin).

Results Determination of cardiac biomarkers: *Increased plasma levels of BNP in 45.7% of patients, from a mean baseline of 89 ng/ml (0–117 ng/ml) to alue 240 ng/ml (0–810 ng/ml),* increasing cTnI values. plasma at 4.34% of cases, the initial values < 0.04 pg/ml to values > 0.04 pg/ml in 2 cases. Echo modifications: anthracycline induced cardiomyopathy or just only diastolic dysfunction of LV in majority of cases, often correlated with cumulative dose of anthracyclines. Biomarkers changes were correlated in most cases with the presence of clinical manifestations and echo modifications induced by anthracycline cardiotoxicity.

Conclusions Clinical or infraclinical manifestations of cardiotoxicity in children treated with anthracyclines is associated with increased levels of cardiac biomarkers: BNP and cTnI which is an useful marker for the cardiotoxicity. Changes in this parameters appeared early than echo modifications in anthracycline induced cardiotoxicity and is necessary to systematic monitoring these parameters during and after cytostatic therapy.

1529 THE STUDY OF THE EFFECT OF CUMIN SEEDS EXTRACTS ON SOME PATHOGENIC BACTERIAL AGENTS

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Background and Aims The antimicrobial effects of cumin (*Cuminum cyminum* L.), as an agent, have been mentioned previously. In this study the inhibitory effect of alcoholic and aqueous extracts on some Gram positive and Gram negative pathogenic bacteria was examined.

Methods Susceptibility of different standard bacterial strains to the prepared methanolic and aqueous extracts were studied by using disk diffusion method in comparison with penicillin and amikacin antibiotics. The bacteria studied were *Escherichia coli* (ATCC 25922), *Pseudomonas aeruginosa* (ATCC 27853), *Kelebsiella pneumoniae* (ATCC 10031), *Bacillus cereus* (ATCC 11778), meticillin susceptible *Staphylococcus aureus* (MSSA) ATCC 25923 and meticillin resistant *Staphylococcus aureus* (MRSA) ATCC 700698. The minimum inhibitory concentration (MIC) of extracts was also determined when necessary.

Results The Methanolic and aqueous extracts of *Cuminum cyminum* (25–100 mg/mL) caused growth inhibition zones of *S. aureus* with the diameter ranged ranging from 9.6–22.4 mm and 14–23.2 mm respectively. For MRSA growth inhibition zones ranged 13–23.4 mm for alcoholic extracts and 11–13.2 mm for the aqueous extract. For MSSA *Staphylococci* the methanolic extract caused inhibition diameter of 13 mm and aqueous extract with the diameter of 10–13

mm. These extracts were ineffective on other investigated bacteria. MIC of alcoholic extracts for MRSA (700698) and MSSA (25923) was determined as 75±35.36 mg/mL.

Conclusions Considering the antibacterial effects of alcoholic and aqueous extracts of cumin seeds on *S. aureus* observed in this investigation, continuing the research for studying the in-vivo effect of anti-microbial effects of *Cuminum cyminum* extracts on *Staphylococci* seems valuable.

1530 THE COMPARISON OF SEVERAL ANESTHETIC PREMEDICATION IN MAGNETIC RESONANCE IMAGING (MRI) UNIT IN PEDIATRIC PATIENTS

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We were aimed to compare the efficacy and safety of midazolam, tramadol and midazolam plus tramadol in magnetic resonance imaging for pediatric patients.

Undergoing MRI, for premedication, doses of midazolam 0.75 mg/kg, tramadol 3mg/kg and midazolam 0.375mg/kg+tramadol 1.5mg/kg were administered. Undergoing MRI, these drugs were determined sedation, anxiety and separation scores, and compared the effects of exposure time, shots of the family and technician satisfaction, reliability and the side effects. Sixty pediatric patients undergoing MRI were selected prospective and randomly.

From patients with ASA I-II risk groups, patients in 1–15 years olds were administered orally premedication before 30 minutes from sedation. After MRI, sedation, anxiety and separation scores in anesthesia recovery unit, the time of undergoing MRI and staying in recovery unit, the frequency of additional sedative drugs administration and the family and technician satisfaction were noted. In addition, follow up was vital parameters and side effects.

The efficiency of sedation in midazolam group was determined better than other groups. In tramadol group, there was not efficiently sedation. For this reason, the need of additional sedation was occurred and prolonged undergoing MRI time. In midazolam+tramadol group, anxiety was lesser than other groups. Comparing the other groups there was maximum nausea side effect in tramadol group and minimum in midazolam+tramadol group.

In conclusion, midazolam group, the best sedation was detected. The use of low dose combination of midazolam+tramadol was not effective for sedation but was decrease anxiety scores and adaptation of separation time in children undergoing MRI.

1531 DRUGS ADMINISTERED IN SICKLE CELL DISEASE VASO-OCCLUSIVE CRISIS

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Background and Aims The vascular occlusion of small vessels with blood cells in sickle cell disease leads to clinical manifestation such as pain crisis and organs' chronic damage.

Objective To study the drugs administered for pain treatment in patients with sickle cell disease vaso-occlusive episodes.

Methods Our study included 40 patients with sickle cell disease with mean age 8.95±0.6 years old under pain treatment.

Results Clinical manifestations observed were vaso-occlusive crisis (100%), splenomegaly (17.5%), stroke (5%), icteric syndrome (5%), acute chest syndrome (2.5%), dyspnea (32.5%).

Patients with mild pain (10%) received dipyrone 22 mg/kg every 6 hours (100%) and tramadol 1.1 mg/kg q 4–8 h (75%).

Patients with moderate pain (52%) received dypirone 19 mg/kg q 6 hours (86%) and tramadol 1.1 mg/kg q 4–8 h (95%) and morphine 0.1 mg/kg every 3–6 hours (33%).

Patients with severe pain (37.5%) received dypirone 19 mg/kg q 6 hours (93%) and tramadol 1.2 mg/kg q 4–8 h (93%) and morphine 0.1 mg/kg every 3–6 hours (60%).

Patients who received tramadol i.v. in intervals over 6 hours (12.5%), and received morphine i.v. in intervals over 4 hours (10%) had moderate and intense pain.

Conclusions Tramadol and morphine i.v. should not be administered in intervals longer than 6 hours for tramadol and 4 hours for morphine due to its half life. (Tramadol T_{1/2}: 5.5 h and morphine T_{1/2}: 2 hours).

Since dypirone inhibits cyclooxygenase and reduces thromboxane levels in platelets, antiagregant effect should be evaluated in sickle cell disease patients.

1532 HEPATITIS A IN PEDIATRIC WARD (EXPERIENCE IN THE PEDIATRIC SERVICE OF CHU OF BATNA)

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Introduction Hepatitis A is a real public health problem worldwide: 273 confirmed cases in Algeria in 2010. She is responsible for 10–30% of hepatitis in adults and 70–90% in children.

Objectives To determine the frequency and severity of hepatitis A.

Materials and Methods A retrospective study done on the records of patients hospitalized for complicated form of hepatitis A over a period of 02 years (2009–2010). 28 patients hospitalized for complicated forms: signs of liver failure.

Results Incidence: 1.15%.

Age group affected is between 5–10 years with a female predominance.

In Algeria the transmission is the predominant waterborne, mostly occurring in winter. Fever, vomiting and asthenia constitute 68.74% of the reasons for consultation. The average AST, ALT was elevated 100 times normal.

Conclusion Hepatitis A is very common in Algeria in connection with a water-borne and the majority of cases are asymptomatic and almost at the age of 18 years 95% of patients develop antibodies.

1533 EPIDEMIOLOGICAL PROFILE OF URINARY TRACT INFECTION IN PEDIATRIC WARD (EXPERIENCE OF A PEDIATRIC SERVICE OF THE UNIVERSITY HOSPITAL OF BATNA)

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Introduction Urinary tract infection (UTI) is one of the most common infectious attacks in children, Pediatrics significant problem for many reasons: its incidence, the polymorphism of clinical manifestations, its potential severity (renal scarring), the possibility of revealing a uropathy.

Objective Evaluate the incidence, morbidity and long-term acute (hypertension, renal failure), the proportion of bacterial strains involved and how they supported.

Materials and Methods Retrospective study done on the records of patients hospitalized in pediatric ward from 01–01–2009 until 31–12–2009.

130 patients were the subject of this study.

Results Incidence: 4.64%.

Frequently females (sex ratio 0.68). The age group most affected is from 30 days to 05 years (range 30 d and 15).

Fever was noted in 110 patients, 44 patients complained of urinary symptoms. The gross hematuria was observed in 07 patients.

Leukocytosis was present in 84.62% of cases; an ESR above 30 in the first hour in 34.61% cases. CRP was positive in 65.38% of patients.

E coli in 22.38% cases, followed in descending order of pneumonias klebsiella, pseudomonas aeruginosa, Proteus, enterococcus.

Ultrasound renal disease 17.16% (7.58% urétérohydronephrose).

The UCR pathological in 9.70% (6% RVU).

Pathological IVU 5.22% (3% urétérohydronephrose).

Conclusion This study confirmed the frequency of UTI in a pediatric setting. However, great efforts are still needed to better support her.

Better knowledge of bacteriology Local: prevalence of germs, sero-typing, with ATB resistance;

The long-term prophylactic treatment of UI also remains to be defined.

Supprimer Répondre Répondre Faire suivre Déplacer Imprimer Actions Suivant Précédent.

1534 SEVOFLURANE ANESTHESIA SIDE EFFECTS IN PEDIATRIC PATIENTS UNDERGOING RADIOTHERAPY

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Background and Aims Sevoflurane anesthesia is related to high incidence of emergence agitation in pediatric patients.

Methods Our retrospective study included 38 pediatric patients with mean age 29±3.94 months, weight mean 14.64±0.55 kg undergoing radiotherapy.

Results Patients with retinoblastoma 55.26% (21), medulloblastoma 23.68% (9) and malignant neoplasm of cerebellum 21.10% (8) which received radiotherapy 27.79±2.16 sessions were studied.

Sevoflurane 8% were administered to 100% of these patients for anesthesia induction and maintenance.

The anesthesia duration was 32.62±2.41 minutes.

Emergence agitation, nausea and allergic reaction were observed.

The incidence of emergence agitation during the anesthesia recovery was observed in 84.21 % (32) compared to 15.79% (6) no agitation side effect patients.

Nausea was observed in 10.53% and allergic reaction recorded in 5.26% of patients.

Either propofol 0.5–4.4 mg/kg administered to 34.38% (11) patients or nalbuphine 0.1–0.15 mg/kg given to 6.25% (2) patients or fentanyl 2–3.6 mg/kg given to 3.12% (1), controlled the emergence agitation induced by sevoflurane anesthesia.

No treatment was applied to 56.25% (18).

Conclusions The association of propofol or nalbuphine to sevoflurane was effective controlling emergence agitation induced by sevoflurane anesthesia in children undergoing radiotherapy.

Stable vital signs were registered previously and after sevoflurane.

One case of anaphylactic reaction was observed in patients undergoing anesthesia with sevoflurane.

1535 NATIONAL TASK FORCE ON SAFE PEDIATRIC MEDICATIONS: IMPROVE THE ACCESS TO LIQUID FORMULATIONS

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