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 investgated by: clinical exam, Doppler echocardiography (Echo), determination of plasma values of 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 anthracicline 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 ant- microbial effects of *Cunminum cyminum* extracts on Staphylococci seems valuable.

1530 THE COMPARISON OF SEVERAL ANESTHETIC PREMEDICATION IN MAGNETIC RESONANCE IMAGINING (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 MRİ, 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-OCLUSIVE 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-oclusive 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-oclusive 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%).