• CASE REPORT CODE:012

Eighteen years follow up of a patient with Gorlin Syndrome; Case report

ABSTRACT

The nevoid basal cell carcinoma syndrome is a rare and autosomal dominant inherited disease with well-defined characteristics, summarized by Gorlin and Goltz in 1960. In the head and neck region, cerebral calcifications, Basal Cell Carcinoma (BCC) and multiple Odontogenic Kerato Cysts (OKC) of the jaws are the predominant findings. Odontogenic keratocysts with high rate of recurrency and basal cell carcinoma of the facial skin are important to dentists. In this article we present a 23 year old male with multiple recurrent cysts of the jaws who diagnosed to have Gorlin syndrome. The patient also has polydactily, palmar and plantar pits, bifid ribs, hypertelorism, calcification of falx cerebri and missing of four wisdom teeth. Diagnosis, treatment and follow up of this case are discussed.

Key words: Gorlin syndrome, Odontogenic keratocyst (OKC), Basal cell carcinoma (BCC), Falx cerebri calcification
CASE REPORT CODE: 011

Serious Lead Poisoning in Oral and inhaled opium abuser

ABSTRACT

A 25 year old man who referred with abdominal pain, nausea and progressive vomiting since 2 months ago and 7kg weight loss from this time. Also he was complaining from generalized bone pain especially back pain and jaundice.

The patient has a long time history of addiction with oral and inhalation form of narcotics.

In physical exam palloriness and icter of mucosa was observed. In mouth examination bluish pigmentation seen at the gum-tooth line. Hepatosplenomegaly and lymphadenopathy was not detected. Upper GI endoscopy was normal. And in lab tests hepatic aminotransferases were increased but alkalin phosphatase was in normal range also indirect billirubin was increased too. CBC test non auto immune hemolytic anemia was deteded , and direct and indirect combs test was negative. BMB and BMA evaluation hyperplasia of erythroid was shown. The patient had a history of smoking and oral narcotics use from 6 years ago. According to all symptoms with clinical doubt of lead poisoning the very high level of lead in narcotic sample was reported and in blood analysis very high level of lead (350mg/dl) was detected. The patient was treated with Ca.EDTA and BAL with decreasing lead level and the symptoms were recovered. There are some reports Similar this case (due to oral narcotics contain Lead) in Iran.

Key word: Hemolytic Anemia, Toxicity Drug
The pandemic virus is currently susceptible to neuraminidase inhibitors; Oseltamivir and Zanamivir but resistant to Amantadine and Rimantadine. Ministry of health and medical education, Center for Infectious Diseases Management in Islamic Republic of Iran is ready for control and management of novel influenza A(H1N1).

**Key words:** Influenza, Pandemi, vaccination, prevention
Emerging and Pandemic of Influenza A(H1N1)

ABSTRACT

Influenza is one of the known viral infectious diseases, which has killed millions of peoples during pandemics, epidemics and sporadic forms.

One of the most remarkable features of influenza virus is the frequency of changes in antigenicity. Alteration of the antigen structure of the virus leads to infection with variants to which little or no resistance is present in the population at risk.

Pandemics of influenza type A, result from the emergence of a new virus which the population contains no or limited immunity to it. The interval between pandemics is 10-30 years. But Influenza virus has been causing epidemics of febrile respiratory disease every 1 to 3 years.

Pandemic (H1N1) 2009 is a new virus that has not circulated among human population before. This virus is different from previous or current human seasonal influenza viruses. Influenza type A(H1N1) virus is transmitted by inhaling infected droplets expelled by coughing or sneezing or by touching contaminated hands or surfaces as the same as the normal seasonal flu.

The symptoms and signs of A(H1N1) influenza are as similar as seasonal influenza and include fever, coughing, runny nose and sore throat. Some people have also reported, nausea, vomiting and diarrhea.

People with existing cardiovascular disease, respiratory disease, diabetes and cancer are at higher risk of serious complications. Asthma and other respiratory disease are other underlying conditions associated with severe disease. Pregnant women are at higher risk for more severe disease and obesity may be another risk factor for severe disease.

To prevent spread, people should cover their mouth and nose when coughing or sneezing, stay at home when they are unwell, clean their hands regularly, and avoid crowded areas if possible.
Snakebite in Iran: Diagnosis, Treatment and Prevention

ABSTRACT

Due to different questions about how to handle snakebite and its mortality, snakebite management is an emergency and it is necessary to be discussed about.

Snakes are divided to three categories including poisonous, semi-poisonous and non-poisonous.

Poisonous snakes are divided to elapidae, viperidae, crotalidae and hydrophidae, each of them cause specific symptoms.

Snakebite can cause local and systemic symptoms. Local symptoms include edema, tissue necrosis and bulla.

Systemic symptoms include hemotoxicity, neurotoxicity, myotoxicity, nephrotoxicity and cardiotoxicity.

In this article snakebite diagnosis, prevention and treatment like antivenom, antibiotic, tourniquet, suctioning, etc. has been discussed.

Key words: Snakebite, Diagnosis, Treatment, Prevention
Single dose versus triple dose of antibiotic in prophylaxis of wound infection in acute appendicitis: prospective randomized study

ABSTRACT

Background: Wound infection is one of the most common problems in surgery and antibiotic usage is one of the ways to prevent it.

Methods: This study was performed for six months. All patients who were admitted for acute appendicitis in even days were given single dose of 500mg of metronidazole via IV route and all the patients who were admitted in the odd days were given single dose of 500mg metronidazole via IV route, plus two separate doses of metronidazole in post operation period.

Results: There were 145 patients who were evaluated for this study with 115 male (79.3) and 30 female (20.7). The first group (n=69) were received single dose of metronidazole where the second group (n=76) were received three doses of metronidazole. All patients had no signs of wound infection.

Conclusion: There weren't any meaningful statistical differences for prophylaxis of wound infection between single dose and multiple dose of antibiotic.

Key words: wound infection, appendicitis, antibiotic
Comparison of postmortem heart and femoral vein blood ethanol concentrations

ABSTRACT

Background: Alcohol abuse is a major cause of medical and social problems and ethanol analysis is the most frequently performed assay in forensic toxicology laboratories. Femoral vein blood is the choice specimen, but occasionally there is no access to it. The aim of this study is the comparison of ethanol concentration between heart blood and femoral venous blood.

Methods: Ethanol concentrations were determined in femoral vein blood and heart blood obtained from 50 forensic necropsies that the time of death was less than 24h. The specimens were stored in duplicate state at 4°C within filled, dark and closed containers with preservative and analyzed by headspace gas chromatography in Forensic Toxicology Laboratory of Tehran’s Legal Medicine Organization with a precision coefficient of variation 5%-7%. The limit of detection was 1 mg/dl and the limit of quantification was 10 mg/dl.

Results: The mean concentration of ethanol in heart blood was 131.88±93.46 mg/dl and in femoral vein blood was 135.96±95.47 mg/dl. The heart blood/femoral blood ethanol concentration ratio was 0.958±.18 and regression correlation coefficient was 0.98. When considered specimens with concentrate ≤100 mg/dl, regression correlation coefficient was 0.859 and in other specimens with ethanol concentration >100 mg/dl was 0.943.

Conclusion: There was no considerable difference between femoral vein blood and heart blood alcohol concentration if the death was happened before 24h and sampling and storage be correct and appropriate

Key words: Femoral vein blood , heart blood , ethanol Concentration
The probiotic effects of Lactobacillus casei in BALB/c mice on the Tumor growth rate bearing breast cancer

ABSTRACT

Background: Antitumor effect of lactic acid bacteria (LAB) have been shown in many studies, this effect maybe as a result of immunomodulatory properties of these bacteria. In present work we have studied the effect of Lactobacillus casei on the tumour growth rate in BALB/c mice bearing breast cancer.

Methods: 6-8 week-old In-bred BALB/c mice, each weighing 25–30 g, were used. There are two experimental group consisted of 9 mice that they were used as controls in each assay. The L.casei ATCC٢٩٣٩٣ strain used in this study was inoculated in MRS broth and cultivated for a day at 37 °C under anaerobic conditions, collected by centrifugation and resuspend in PBS. After preparation of proper amount of these suspension it was orally administered to the mice with a gastric feeding, Control mice received an equal volume of PBS in duration of study.

Results: results of this study showed that oral administration of L.casei can inhibit the tumour growth and increased the local inflammation in DTH assay as a result of increase in immune responses efficiency.

Conclusion: In conclusion oral administration of Lactobacillus casei may regulate immune responses skewed Th1 balance and maybe helpful for cancer immunotherapy, but further studies is needed to investigate the other mechanisms of this effect.

Key words: probiotic, Lactobacillus casei, Tumor growth, Breast cancer
Assessment of hospital sterilizer equipments performance and related effective factors

Background: For controlling the nosocomial infections in the hospitals, use of sterilizer devices such as: steam autoclave, chemiclave, Gas plasma, Oven and Vaporized Hydrogen Peroxide are approved. According to standardized directions, these equipments needs to be tested physically, chemically and biologically continuously. The most trusted way for sterilization monitoring is the biologic one.

The main purpose of this study is to assess the performances of the sterilizer devices, that are presented in affiliated hospitals to Tehran University of medical sciences with biologic monitoring way.

Methods: This is a cross-sectional study conducted in all 135 devices that are presented in CSR units of 14 hospitals and related responsible staff. In this study, sterilization process was assessed by using of spores, microbial vials and culturing of the samples and also, the Knowledge of CSR personnel was measured by a valid and reliable questionnaire. We have used, T-Test for data analysis in this study.

Results: 14 out of 135 devices (10.4%) were not in good function. there was a significant relationship between age of personnel and their knowledge. There were significant relations between the sex (0.001), educational grade (0.02), years of experiences, and the knowledge of the staff (P=0.001) and also CSR unit area in this study.

Conclusion: this study suggests that hospitals must have CSR units with sufficient area and educated personals in related fields. They must also regularly educate the staff, especially males that are responsible in CSR units.

Key words: Sterilization, CSR, Steam Autoclave, Oven, Ethylene Oxide
ORIGINAL ARTICLE  CODE: 04

Practice of midwives working at midwifery offices toward performance of professional standards and effectiveness of continuous evaluation and education on them in Shiraz (2007)

ABSTRACT

Background: The most important aim of health program is health of population for getting this aim professional standards education as well as evaluation and assessments on providers have an important role. The purpose this study was survey midwives' Practice of working at midwifery offices toward performance of professional standards and effectiveness of continuous evaluation and education on them.

Methods: This study is an interventional study in which all of midwifery offices (53) were researched. The study was done in three processes that Standard check list were completed each process after interview, observation, control and assessment of midwives, functions. Then datum is collected and analyzed.

Results: Overall mean score of fault at midwifery offices decreased from step 1 to step 3 in these fields: environmental health and infection control (P<0.0001), personal and patient care (P=0.003), individual health (P=0.03) and obey of laws and rules (P<0.0001).

Conclusion: Along with all standards education, continuous evaluation on people's function is necessary till faults and deficiencies were observed and resolved as soon as possible that educational programs succeed consequently..

Key words: midwifery offices, professional standards, education
ORIGINAL ARTICLE

Performance Evaluation of Ayatollah Kashani Hospital Based on Baldrige Organizational Excellence Model

ABSTRACT

Background: Aimed to systematic self-assessment, with main performance criteria, Organizational Excellence Models make it possible to evaluate performance of Health Care Sector within a fundamental and systematic framework, leading to development of management skills in the field of performance evaluation.

Methods: Performance of the concerned hospital was evaluated based on Baldrige Scoring System with process and results criteria. For process criteria, the hospital was evaluated in specific areas with 13 process sub criteria, based on four factors of “Approach”, “Deployment”, “Learning”, and “Integration”. For result criteria, the hospital was evaluated in specified areas with six results sub criteria based on four factors of “Performance level”, “Rate and breadth of performance improvement”, “Appropriate Comparisons and/or benchmarks”, and “Linkage of evaluation results measures”.

Findings: The hospital obtained 231.35 scores out of total 550 scores for process criteria in the model and 111 scores out of 450 scores for results criteria, as its performance results in 2006. In sum, the hospital obtained 347.35 scores out of 1000 scores for both criteria as its performance in 2006.

Conclusion: Using Baldrige Model in evaluation of performance of country’s hospitals can provide a continuous and systematic self-assessment, facilitating organizational learning and improvement and continuously providing hospitals with inputs, outputs, system components, process and feedbacks.

Key words: Performance Evaluation, Hospital, Self-assessment, Organizational Excellence Model, Baldrige Model.
Fire work-related injuries in TEHRAN’s Charshanbe Soori

ABSTRACT

Background: Fireworks are the leading cause of injuries in the ceremony of Chaharshanbeh Soori in Iran. The present study was designed to assess the prevalence and the severity of such injuries, the high-risk population, the causes and the accompanying morbidities in such ceremonies.

Methods: This cross-sectional study was performed on individuals referred to different medical centers by Tehran Emergency Service due to fireworks- and Chaharshanbe soori-related injuries in 2007. The patients' demographic data, the cause of the accident, the type of the firework, the severity and the site of the injury, the performed prehospital and hospital care, and the patients condition at the time of discharge were extracted from the patients medical records. The information on the severity of the remaining morbidities in 8 months after the accident was also gathered.

Results: About 197 patients were enrolled in this study. The mean age of the patients was about 20.94 ± 11.31 years. The majority of them were males. Crackers and home-made grenade were the most frequent cause of injury. The most frequently reported injuries consisted of burns, laceration and contusion, soft tissue injury and bone injuries, respectively.

Conclusion: Fireworks should be produced and distributed based on standard regulations. Educating the families and students, and holding public ceremonies under the direct control of the families are considered as important strategies in reducing such injuries.

Key words: Chaharshanbeh Soori, Fire works, burn
Effect of hepatitis C and B infections on anemia in hemodialysis patients

ABSTRACT

Background: Hepatitis C (HCV) and B (HBV) infections are commonly seen in dialysis patients, but their long-term deleterious effects in these patients are unknown. We evaluated the effect of HCV and HBV infections on anemia in our hemodialysis population.

Methods: A total of 90 chronic hemodialysis patients with anemia at kamkar and Hazrat Valiasr hemodialysis centers were included for the period 3 months, in 2008. Data classified according to the hepatitis-free, chronic hepatitis B and C groups. Nineteen HCV-positive and eleven HBV-positive patients were included for comparison analysis with 60 control patients. Erythropoietin was administered for 3 month. They were followed for 3 months and their hemoglobin and hematocrit were measured before administration of erythropoietin and the end of third month. For statistical analysis, T-test was employed.

Results: The mean rise of hemoglobin and hematocrit in hepatitis-free, HCV and HBV groups were $1.50 \pm 1.45$ g/dL and $3.88\% \pm 5.01\%$, $2.56 \pm 1.40$ g/dL and $7.56\% \pm 3.75\%$, $1.86 \pm 1.17$ g/dL and $5.73\% \pm 4.11\%$, respectively. The mean rise of hemoglobin and hematocrit in HCV group was significantly higher than hepatitis-free group and t-test showed a significant statistical correlation. However the mean rise of hemoglobin and hematocrit in HBV group was higher than hepatitis-free group but t test didn’t show a significant statistical correlation.

Conclusion: We found that hepatitis C virus infection was associated with significant elevation in mean of hemoglobin and hematocrit than hepatitis-free group.

Key words: Hepatitis C, Hepatitis B, hemodialysis, anemia