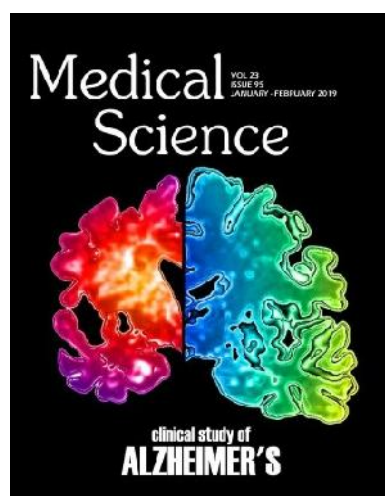


Medical Science

About the Cover



The most common form of dementia, which is the progressive loss of cognitive function and often occurs in old age, is Alzheimer's disease. Alzheimer's disease is a chronic progressive and debilitating brain disorder that has had profound effects on memory, intelligence and self-care. Considering that in some studies there was no significant relationship between Alzheimer's disease and diabetes. Therefore, this epidemiological study was conducted to investigate patients with Alzheimer's and some of its risk factors with the aim of determining the Epidemiological and clinical study of patients with Alzheimer's in Five Cities of Khuzestan Province in 2016-2018. The study included 854 patients with Alzheimer's cases that were inhabited by five of the Khuzestan Province, and reviewing patient records was performed by ten researchers. After obtaining the necessary permissions and sponsorship by Behbahan University of medical sciences, Patients were informed through written consent; their files were used for this study. The data in this study included demographic, laboratory and clinical data of patients. Data were entered into SPSS software version 18 and analyzed by descriptive statistics, analytical tests and significant level of $P < 0.05$. The study included 854 Alzheimer's patients with a mean age of 63.00 ± 11.51 years. Of these, 66.8% were male and the rest were women. In this study, 230 (26.9%) patients had a history of smoking and did not consume the rest. Of the 225 (26.3%) patients with Alzheimer's family history, 144 (34.8%) had a history of diabetes. Also, 25.5% of the family history of diabetes, 99 (11.5%) had a history of mental illness. There was a significant relationship between marital status and diabetes history ($p < 0.0001$). There was a significant relationship between marital status and smoking history ($p = 0.003$). In this study, there was a significant relationship between the history of smoking and Alzheimer's history, and also was significant relationship between the history of diabetes and the history of Alzheimer's disease, So it can be said that diabetes and smoking are two risk factors for Alzheimer's disease. It is necessary to identify other important risk factors by conducting epidemiological studies such as the current study and even the larger sample size. It is also better to take the necessary measures to prevent the risk of a new factor for the disease. (Ref: Mostafa Madmoli, Zahra Kord, Azita Bandani, Negin Sedighi, Mahla Rezaei Shandiz, Pouriya Darabiyan, Alieh AfsharNia. Epidemiological and clinical study of patients with Alzheimer's in Five Cities of Khuzestan Province in 2016-2018. *Medical Science*, 2019, 23(95), 1-5).

Epidemiological and clinical study of patients with Alzheimer's in Five Cities of Khuzestan Province in 2016-2018

Mostafa Madmoli, Zahra Kord, Azita Bandani, Negin Sedighi, Mahla Rezaei Shandiz, Pouriya Darabiyan, Alieh AfsharNia

The most common form of dementia, which is the progressive loss of cognitive function and often occurs in old age, is Alzheimer's disease. Alzheimer's disease is a chronic progressive and debilitating brain disorder that has had profound effects on memory, intelligence and self-care. Considering that in some studies there was no significant relationship between Alzheimer's disease and diabetes. Therefore, this epidemiological study was conducted to investigate patients with Alzheimer's and some of its risk factors with the aim of determining the Epidemiological and clinical study of patients with Alzheimer's in Five Cities of Khuzestan Province in 2016-2018. The study included 854 patients with Alzheimer's cases that were inhabited by five of the Khuzestan Province, and reviewing patient records was performed by ten researchers. After obtaining the necessary permissions and sponsorship by Behbahan University of medical sciences, Patients were informed through written consent; their files were used for this study. The data in this study included demographic, laboratory and clinical data of patients. Data were entered into SPSS software version 18 and analyzed by descriptive statistics, analytical tests and significant level of $P < 0.05$. The study included 854 Alzheimer's patients with a mean age of 63.00 ± 11.51 years. Of these, 66.8% were male and the rest were women. In this study, 230 (26.9%) patients had a history of smoking and did not consume the rest. Of the 225 (26.3%) patients with Alzheimer's family history, 144 (34.8%) had a history of diabetes. Also, 25.5% of the family history of diabetes, 99 (11.5%) had a history of mental illness. There was a significant relationship between marital status and diabetes history ($p < 0.0001$). There was a significant relationship between marital status and smoking history ($p = 0.003$). In this study, there was a significant relationship between the history of smoking and Alzheimer's history, and also was significant relationship between the history of diabetes and the history of Alzheimer's disease. So it can be said that diabetes and smoking are two risk factors for Alzheimer's disease. It is necessary to identify other important risk factors by conducting epidemiological studies such as the current study and even the larger sample size. It is also better to take the necessary measures to prevent the risk of a new factor for the disease.

Medical Science, 2019, 23(95), 1-5**Young age Iraqi Women with Breast Cancer: an overview of the correlation among their clinical and pathological profile**

Manwar Abdulelah Al-Naqqash, Shaymaa Mohammed Radhi, Tara Farooq Kareem, Hayder Adnan Fawzi

Globally, breast cancer is the most frequently diagnosed cancer in women. Young women with breast cancer represent a subset of breast cancer with its unique characteristics and outcome compared to older women. To assess Iraqi female breast cancer patients' clinical profile, and evaluate patients' molecular profile. An observational cross-sectional study conducted in the tertiary hospital, Baghdad Medical City, Baghdad oncology teaching hospital. 1349 women with breast cancer of whom 202 had age less or equal to 40 years involved. The prevalence of young with breast cancer (defined as ≤ 40 years) as 15%, (7.9%, 4.8%, 2.1% and 0.2% for 36 – 40, 31 – 35, 26 – 30 and 20 – 25 years respectively). There was high ER and PR positive status 74.4% and 74%, with 23.1% Her2 positive (+3) while 16.3% were equivocal (+2), and 10.2% as triple negative. Luminal A is the most molecular subtype 50%. There was a slight positive trend of increase ER and PR expression with an increase in age and there was a slight negative trend of increment of Her2 expression and triple negative with increase in age. Lower age associated with increased odds for having stage IV or metastatic disease. The highest age group was 36 – 40 years in the young women, with the highest expression for ER status and the lowest for triple-negative disease, around one-quarter of the patients express her 2 positive diseases, age appear to have the weak effect on hormonal and immune-histochemistry characters of the tumors.

Medical Science, 2019, 23(95), 6-11**The effectiveness of Group Interventions based on Parent-child Relationship on Promoting Child-rearing in parents of Children with Attention-Deficit Hyperactivity Disorder, aged 6-11 years**

Nasrin Mahmoodi, Roghaie Mousavi

Parent-child relationship and communication and child-rearing practices are one of the most important family factors that affect the mental health of the family. The present study was conducted in order to investigate the effectiveness of family-oriented psychological interventions (parent-child-based education) on improving child-rearing in parents of ADHD children aged 6-11 years old. In a quasi-experimental study using pre-test and post-test design with three experimental groups of Drug therapy, combined (drug therapy and family-oriented intervention) and family-oriented, mothers of 30 children with ADHD disorder were selected by multi-stage cluster sampling method; these subjects were randomly selected from the educational districts of Tehran. The combined and family-oriented groups were trained in a parent-child relationship group for 10 sessions and the drug therapy group received only medication. Subjects were assessed by Alabama parenting scale in two stages (before intervention and after intervention). Data was analyzed using covariance analysis. The results of the present study showed that the implementation of a parent-child-based educational program resulted in a significant improvement in child-rearing methods of parents with ADHD children in both the combined and family-oriented group. Parent-child relationship education is effective in improving child-rearing methods in parents of ADHD children; so, it is suggested that therapists use this method to help parents of this particular group of children.

Medical Science, 2019, 23(95), 12-18

ANALYSIS

Comparison of the effects of all-*trans* retinoic acid, methotrexate, actinomycin D, and combined chemotherapy on different choriocarcinoma cell culture models

Görker SEL, Müge Harma, Mehmet İbrahim Harma, İshak Özel Tekin

Our objective was to investigate the efficacy of all-*trans* retinoic acid (ATRA) alone and in combination chemotherapy with methotrexate (MTX) and combined with actinomycin D (Act-D) in choriocarcinoma cell culture models (JAR, JEG-3). JAR and JEG-3 cells were cultured. ATRA, MTX and Act-D trial groups were determined with different doses. DMSO was applied as control group. Drugs were administered to the cells simultaneously, and 72 hours after drug administration, the cells were detached using trypsin-ethylenediamine tetraacetic acid solution. The degree of apoptosis was determined by flow cytometry. Statistical analyses of the apoptotic ratios were performed using SPSS 19.0 and the Wilcoxon test. The ratio of apoptosis was statistically significant when only ATRA was applied on JAR and JEG-3 cell culture lines versus control group, $p < 0.05$. The ratio of apoptosis was increased on JAR and JEG-3 cell culture lines, when ATRA was added in the combination of MTX 2 μM , ACT-D 0.1 μM , $p < 0.05$. ATRA increased the apoptotic ratios in both JAR and JEG-3 cell cultures. The apoptotic ratios were increased with the higher ATRA doses. The application of ATRA, MTX and Act-D combination on the JAR and

JEG-3, cell line models, is made in both cell lines for the first time in the literature. The apoptotic data reveal that: ATRA could be used in choriocarcinoma treatment. Also, the combination of ATRA, MTX, and Act-D had stronger apoptotic effects than did the combination of MTX and Act-D. Therefore, ATRA also could be used as a synergistic drug and an option to combat the multi-drug resistance often encountered in the treatment of choriocarcinoma.

Medical Science, 2019, 23(95), 19-23

CASE SERIES

Comparison of prevalence of depression in cancer patients treated with chemotherapy and radio chemotherapy in the hospital Tohid Sanandaj

Modabber Arasteh, Seyedeh Asrin Seyedoshohadaei

Depression is the most common human diseases in the past 2500 years and more recently more attention to it. However, despite significant advances in cancer medicine remains as one of the most important disease is present. This study compared the prevalence of depression in cancer patients is hospitalized oncology patients with chemotherapy and radiotherapy, which has been done about them. This study is a cross-sectional study was performed on 200 patients, 102 patients in radiotherapy, chemotherapy, and 98 patients in the chemotherapy group. Samples were available for sampling using the Beck Depression Inventory was conducted, Data using SPSS statistical software and descriptive statistics and Chi-square and T-test analysis was performed. The results showed that the average age of $49/3 \pm 1/3$ years. 88% of the participants were married. 73/5% of subjects had levels of depression. Prevalence of depression in radiotherapy and chemotherapy (44/47 %) than the chemotherapy group (29/03 %) were. Prevalence of depression at age 60 years and older (30/5%) was higher than other age groups. Between age, education level, place of residence and chemotherapy sessions with an average prevalence of depression in the two groups, there is a statistically significant relationship ($p < 0.05$) and Between sex, marital status, type of cancer, with a prevalence of depression in both groups there was no statistically significant relationship ($p > 0.05$). The high prevalence of depression in the group of patients need psychological counseling and psychiatric treatment will last more than and the diagnosis and treatment of depression in the early stages and can be a major help to these patients.

Medical Science, 2019, 23(95), 24-29

Diabetes and its predictive role in the incidence of Alzheimer's disease

Mostafa Madmoli, Yasaman Modheji, Alireza Rafi, Rezvan Feyzi, Pouriya Darabiyan, Alieh AfsharNia

Diabetes is the fifth cause of death in most countries of the world and Causing disability, high cost of treatment and increased mortality. Some studies indicate that one of these complications of diabetes is the development of Alzheimer's disease. So this study was done to the aim of determine the predictive role of diabetes in the development of Alzheimer's disease in diabetic patients admitted to hospitals Three cities from Khuzestan province. This study is a retrospective cross-sectional analytical descriptive study. The study included a survey of 1855 cases of diabetes patients admitted to hospitals in Shoushtar, Behbahan, and Abadan, which was conducted by eight investigators. The records of these patients diagnosed with diabetes and referring to medical centers in the mentioned cities during 2015-2017, which were extracted from medical records of city hospitals and entered the study. The data in this study included demographic, laboratory and clinical data of patients. Then, Data were entered into SPSS software version 17 and analyzed by descriptive statistics, analytical tests and significant level of $P < 0.05$. The study included 1855 individuals with diabetes with an average age of 57.00 ± 46.23 years. Of these, 1122 (60.4%) were female and the rest were male. In terms of job, the highest percentage was related to free employment with 653 people (35.2%). In this study, 258 (13.9%) of those with diabetes also had Alzheimer's disease. And a statistically significant relationship was found between jobs with those with Alzheimer's disease (0.003). There was a significant relationship between diabetes and those with Alzheimer's disease ($p = 0.006$). But there was no significant relationship between diabetes and those with a history of cardiovascular disease ($p = 0.09$). In this study, there was a significant relationship between diabetes and those with Alzheimer's disease. Therefore, this study showed the risk of Alzheimer's disease in diabetic patients in the three counties. Therefore, follow-up is needed to prevent diabetes. And measures to change lifestyles, such as the use of aerobic exercise, a healthy diet should be done. Also, regular referral to the Doctor should be done in these patients.

Medical Science, 2019, 23(95), 30-34

Determinants of health care seeking behavior of pregnant slums dwellers in Bangladesh

Most Nasrin, Md Nazirul Islam Sarker, Nazmul Huda

Pregnancy is not itself a disease but a cause of mortality in developing countries. The aim of this study is to explore health care seeking behavior among pregnant women. A quantitative mixed qualitative approach has been adopted. One hundred twenty-nine pregnant women in various slums in Dhaka city have been interviewed to explore the determinants of healthcare seeking behaviors during pregnancy. The study reveals that only 3.1% women received four times antenatal visits which is recommended by WHO but rest 96.9% women received poor service than the standard level. This further explores that 83.7% of the women have ability to spend the treatment cost while 16.3% have no ability. The main reasons of no ability to spend the treatment cost are due to economic insolvency (45%), prohibition from husband (30%), family restriction and self-unwillingness (10%), and no income (5%). The majority (68.2%) of the women have chosen home as their delivery place while 10.07% in NGO clinic, 13.1% in community clinic and 4.6% in government hospital as their delivery place. The study also explores that the majority (47.3%) have chosen NVD as mode of delivery while 32% as NVD with episiotomy and 11.6% as C-section as their mode of delivery. The study suggests that a continuous healthcare development emphasizing pregnancy should be required to reduce the pregnancy related complexities and mortality rate.

Medical Science, 2019, 23(95), 35-41

RESEARCH

Prevalence of human papillomavirus in oral and laryngeal squamous cell carcinoma: A comparative study by polymerase chain reaction

Sadiq Musa Ahmed, Sami Khalef Jabar

Squamous cell carcinoma (SCC) is the most common malignant histological type in Oral cavity and Larynx. Human papillomavirus (HPV) is one of the most common causes of sexually transmitted disease in both men and women worldwide. It is associated with a variety of clinical conditions that range from innocuous lesions to cancer. Human papillomavirus (HPV) has been confirmed the primary etiological factor that

transforms cervical epithelia into cancer. The presence of HPV in oral and laryngeal cancers suggests that HPV may play a similar role in transforming the oral epithelia. The study aimed to determine the prevalence of human papillomavirus infection in oral and laryngeal squamous cell carcinoma in Iraqi patients with high risk typing 16,18. Total of 80 cases oral and laryngeal squamous cell carcinoma are enrolled in this study, forty cases for each. The study sample analyzed by PCR to determine the HPV positive and negative cases using consensus probe. Genotyping of HPV was performed using a specific probe for high oncogenic-risk HPV genotypes 16, 18. Demographic data of the study sample showed that males were more than females (62.5 %, 37.5%) respectively. No statistical difference in age groups was found among the study groups, while there was a significant difference in grading among study them (P-value = 0.04). Polymerase chain reaction revealed positive HPV in 12 cases (15%). High-risk HPV16 was detected in 9 cases (2.5% laryngeal SCC and 20% were oral SCC). No significant relation was found between HPV in respect to the histopathological grade, gender and age group in the total sample. The high-risk HPV16 detection in 20% of oral squamous cell carcinoma cases it might play a role in transforming the oral epithelia. There was no significant association between HPV-16 DNA and the demographic data of OSCC.

Medical Science, 2019, 23(95), 42-47

CASE SERIES

The correlation between alcohol consumption and reducing the age of cancer incidence in patients with this disease

Mostafa Madmoli, Mehdi Fallah bagher shaidaei, Akram Rohani, Pouriya Darabiyan, Fariba Mobarez

Cancer is one of the leading causes of death worldwide. Given that since 1988, the International Agency for Research on Cancer has identified alcohol as the first group of carcinogens that in the highest level of risk and in Khuzestan province there are limited studies on the relationship between alcohol and cancer. Therefore, the aim of this study was to determine the Correlation between alcohol consumption and reducing the age of cancer incidence in patients with this disease Resident in Khuzestan province from 2016 to 2018. *Materials and Methods* This study is a retrospective cross-sectional analytical descriptive study. And included a survey of 2483 patients with various types of cancer Hospitalized in Shafa and Baghaei 2 Hospitals, resident of Ahwaz, Shoushtar, Abadan and Behbahan, which was conducted by nine researchers investigate their cases. Patients diagnosed with any cancer and referred to treatment centers in the aforementioned city from 2016 to 2018 were investigated and entered to study. All cancer patients were of different types in each age group and sexually diagnosed with the disease. Enter into the study and records that had medical diagnosis other than the disease, and files that were incompletely filled, were excluded. The data in this study included demographic, laboratory and clinical data of patients. Data were then entered into SPSS software version 20. Data were analyzed using descriptive, analytical, and significant level of $P < 0.05$. The study included 2483 cancer patients with an average 61.00 ± 43.36 age of years of these, 1447 (58.2%) were female and the rest were male patients. In this study, 216 (8.6) had a history of alcohol consumption and the rest did not consume any. There was a significant relationship between sex with a history of alcohol consumption ($p < 0.0001$). Also, there was a significant relationship between age and alcohol consumption ($p = 0.001$). Also, patients who consumed alcohol, compared to those who did not consume alcohol, had a lower average age, so we can say that alcohol reduces the age of incidence to cancer. In this study, a significant relationship was found between age and alcohol consumption. Also Patients who had consumed alcohol, compared to those who did not eat at all, they had a lower average age, so we can say that alcohol reduces the age of incidence to cancer. Therefore, it is necessary to follow up on the prevention of alcohol addiction and they should be treated after alcohol addiction, and it must be done preventive measures to prevent than incidence to cancer.

Medical Science, 2019, 23(95), 48-53

Exploring social health and work conscience among nurses working in hospitals of Shiraz, Iran

Zahra Foolad, Mostafa Amini Rarani, Shayesteh Salehi

In hospitals, it is of high significance to give due attention to the behavioral and social status of nurses as the key staff of the medical environment, and this can guarantee the desirable quantity and quality in providing services for the patients. The present study was conducted to investigate the relationship between social health and work conscience in nurses working in the selected hospitals of Shiraz University of Medical Sciences in 2017. The sample of the present study includes 569 nurses working in the 5 selected hospitals located in Shiraz, Iran. The sampling was conducted with a random stratified sampling in proportion to the strata size. Questionnaires of work conscience and social health as well as the questionnaire of pairwise comparison and decision matrix were used for collecting the data. Structural equation modelling was applied to test the research questions using SmartPLS 3. The findings indicated that there is a significant statistical relationship between social health and work conscience (0.483). Moreover, other findings of the present study indicated that there is a significant relationship between all 7 aspects of social health and work conscience. The effect of social responsibility, conscientiousness, family relationship, attitude to society, social participation, empathy, and social interaction on work conscience was 0.366, 0.209, 0.203, 0.299, 0.147, 0.126, and 0.473 respectively. Since social health and its aspects have significant effects on work conscience, the hospitals are required to give due attention to the nurses' social health.

Medical Science, 2019, 23(95), 54-57

REVIEW

Bariatric metabolic surgery outcome and the genetic makeup of the patients: a review

Susmit Kosta, Mohit Bhandari, Winni Mathur, Mal. Fobi

Bariatric Metabolic Surgery (BMS) can shrink waistline but a new studies show it can cause surprising changes in genes. Combined with environmental influences, genes are up to 70% responsible for body's weight. BMS may be the only effective way to alter these genetically predetermined body processes. In this review we analysis and interpretation of recent literature regarding to the different genetic forms of obesity and its implications in the BMS practice. The identification of genes involved in monogenic, syndromic and polygenic obesity, has improved our understanding about the mechanisms of its development as well as the potential effect of these genes over the outcome of BMS. There are no reports in the literature about the effect of BMS in monogenic obesity. Surgery has demonstrated discreet results in patients with syndromic obesity in comparison whit normal obese individuals. Regarding polygenic obesity there are some reports of certain single nucleotide polymorphisms (SNPs) associated with a greater weight-loss in the postoperative. Genetics have a considerable contribution to the development of different forms of obesity. Similarly, several and different BMS techniques used for weight-loss have demonstrated to be effective but variable on their results. For this reason, we strongly recommend surgeons to be aware of the potential genetic aspects and it's applications of this field for better selection and treatment of obese patients.

Medical Science, 2019, 23(95), 58-62

The rate of some complications and risk factors of diabetes in diabetic patients: Study on cases of 3218 diabetic patients

Mostafa Madmoli, Zahra Mahmoudi Dehcheshmeh, Alireza Rafi, Zahra Kord, Fariba Mobarez, Pouriya Darabiyan

Diabetes is a metabolic disease characterized by chronic hyperglycemia which causes damage to various organs of the individual and reduces longevity. Because diabetes has multiple complications and risk factors which needs to be identified and prevented and So far, few studies have been conducted in Khuzestan province and in Shoushtar city about diabetes and its complications and risk factors. Therefore, this study is a five-year study of diabetic patients from 2014 to 2018 in Khatam-ol-Anbia Hospital of Shoushtar city, which contains 3218 cases. And it was done with the aim of determining the rate of some complications and risk factors of diabetes in diabetic patients. This study is a retrospective cross-sectional analytical descriptive study. 3218 cases of diabetes patients hospitalized in Khatam-ol-Anbia Hospital, Shoushtar which was studied over the course of 5 years from 2014 to 2018. Information required for this study by survey of patients' cases from 2014 to 2018 in the hospital medical records unit were extracted. Information reviewed in this study included demographic, laboratory and clinical data of patients. Then, data was entered into SPSS version 17 and using descriptive statistics and analytical tests and a significance level of $P < 0.05$ was analyzed. This study included 3218 individuals with diabetes mellitus with an average age of 58.06 ± 32.58 years of these, 1853 (57.5%) were male and the rest were female. Also the mean of BMI was 32.16 ± 5.08 , representing patients with class 1 obesity. In this study, 14.4% of individuals had the diabetic foot ulcers and the rest did not have. Also, 10.1% of subjects had limb amputations. 13.0% had diabetes eye disease, 23.4% had diabetes kidney disease. There was a significant relationship between education level and diabetic foot ulcer ($p = 0.002$), that way People with lower levels of education were more likely to develop diabetic foot ulcers. In this study, there was a significant relationship between drug use or smoking with diabetes mellitus and cardiovascular disease ($P = 0.003$). Because in this study, there was a significant relationship between drug use or smoking with diabetic foot ulcer and cardiovascular disease, and that drug use increases the risk of infection and it reduces the healing of diabetic foot ulcers and it can increase the amputation of the limbs, Therefore, planning and training through mass media should be given in this regard. Also, the mean of BMI in this study, was represents obesity grade 1 in these individuals. Therefore, by preventing more obesity, eating healthy and light food and doing aerobic exercise, can prevented from complications of obesity that provides the necessary grounds for cancer and other harmful complications.

Medical Science, 2019, 23(95), 63-68**Communication between body mass index and the risk of obesity-related cancer: A 5-year study on patients with cancer**

Mostafa Madmoli, Mehran Yarbig, Negin Sedighi, Pouriya Darabiyan, Fariba Mobarez

Cancer is one of the chronic and non-communicable diseases that include a wide range of diseases considering that, significant correlation was found in some studies between cancer and BMI higher than normal, and so far in this field few studies have been done in Khuzestan province and Ahwaz city. Also, planning to increase the health level of cancer patients in khuzestan province, it needs to know all the risk factors for the disease in this province. Therefore, this 5-year study on cancer patients referred to Shafa Hospital in Ahvaz, with the goal Determine the communication between body mass index and the risk of obesity-related cancer. In this retrospective cross-sectional descriptive-analytic study, 1346 cases of patients with different types of cancer with BMI > 30, admitted to Shafa Hospital, Ahvaz city which for 5 years, with the diagnosis of any cancer and history of the disease with a BMI of over 30, And referring to the Ahvaz Shafa hospital, from 2012 to 2016, entered the study. The inclusion criteria included all patients with a medical diagnosis and history of any type of cancer with a BMI > 30, and in each age group and sex, and the exit criteria included other records of patients who had non-cancer medical diagnosis, cases with a BMI of less than 30, as well as incomplete cases. The data in this study included demographic, laboratory and clinical data of patients. Data were then entered into SPSS software version 20 and analyzed by descriptive statistics, analytical tests and significant level of $P < 0.05$. This study included 1346 individuals with different types of cancer with an average age of 64.08 ± 88.52 years and 754 (56.0%) were female and the rest were male. Also, the mean BMI in these patients was 33.16 ± 5.08 , that indicating patients with moderately obese (Obese Class I). In this study, the relationship between BMI and education was significant ($p = 0.002$). Also, 944 (70.1%) patients had malignant tumors and the rest were benign. The highest prevalence of cancer in this study was related to gastrointestinal cancers with 55.5%. In this study, also was calculated BMI for different types of cancer, that the highest incidence was related to gastrointestinal cancer (BMI = 35.57 ± 9.06). In this study, 456 (33.8%) patients had a history of diabetes. There was a significant relationship between the history of diabetes and gastrointestinal cancers ($p = 0.008$). In this study, the average body mass index of patients was moderately obese (obese class I). Also, the highest incidence of cancer in this study was related to gastrointestinal cancers, and there was a significant relationship between the history of diabetes and gastrointestinal cancer. Therefore, it is necessary to make changes in the lifestyle of people living in Khuzestan province. Also can prevented from developing obesity and diabetes which provides the ground for all types of cancer, especially gastrointestinal, with doing aerobic exercise, nutrition correction and not taking foods high in fat and high cholesterol.

Medical Science, 2019, 23(95), 69-74

RESEARCH

Clinicopathological findings of thirty-nine gastrointestinal neuroendocrine neoplasms

Yılmaz BAŞ

In this study aimed to re-evaluate the clinicopathological parameters of gastrointestinal system neuroendocrine neoplasms (GIS-NENs) that have been diagnosed in our pathology department between 2008 and 2017, and to examine survival durations. The study included GIS-NENs samples of 39 patients. The total number of organ biopsies, the number of NENs, age, gender, localization, diameter, mitosis, necrosis, lymphovascular invasion and perineural invasion characteristics were evaluated. The association between survival and Ki-67 index was analysed. We identified 39 cases of GIS-NENs that had developed from the appendix, stomach, rectum, cecum, ileum, and duodenum. Thirty four cases were diagnosed with G1 (87.2%), one case with G2 (2.6%), and four cases with G3 (10.3%). One patient was diagnosed with G3 and T2 and died during the 9th month under treatment. Another patient diagnosed with G3 and T1 died during the 26th month. In the diagnosis of GIS-NENs has increased in recent years because of the widespread use to endoscopy. While endoscopic and small diameter NENs are histologically evaluated, after all sections of the tumor tissue have been examined in the largest area, the Ki-67 index score and mitotic rate should be determined based on the WHO 2010 classification criteria. According to the Cox regression result, a unit increases in the Ki-67 index increases the probability of death by 3.1%.

Medical Science, 2019, 23(95), 75-81

Association between the Quality of Life and Work Life Performance in the personnel of Jahrom University of Medical Sciences

Farideh Mogharab, Nader Sharifi, Shiva Bigzadeh, Fatemeh Honarmand Jahromy, Safieh Jamali

One of the most important goals of organizations and employees is to improve the quality of work life (QWL) in employees. Accentuating on QWL of staff is the basis for the improvement of performance. Therefore, such entities as medical science organizations and the affiliated personnel as the founders of public mental health should primarily have this mental priority. This research aims to evaluate QWL and its relationship with employee performance. This research was a descriptive survey carried out on 171 employees at Jahrom University of Medical Sciences in 2017. Data were collected using two questionnaires of Walton QWL and staff performance assessment. The numbers of male and female participants in this research were 70 (41.7%) and 58.3%, respectively. The employees' QWL averaged 76.64 ± 16.56 . The results also showed positive significant associations between the components of QWL (fair) and adequate compensation, safe and healthy work conditions, opportunity for continued growth and security, constitutionalism in the work organization, social relevance of work life, total life space, social integration in the work organization, development of human capabilities) and employee performance ($P < 0.05$). According to the relationship between QWL components and employee performance, the organization can improve the performance of employees by promoting these components.

Medical Science, 2019, 23(95), 82-85

Assessment of BMI, Duration of Diabetes, Fasting lipids, S. Creatinine, and Microalbuminuria in Glycemic Control: A 10 year's follow-up study

Mohammad Zubair, Marai Mohammed Alamri

Diabetes is directly associated with various life-threatening diseases like renal failure and cardiac disruption. Similarly, hypertension is accompanied by diabetes, which can lead to microalbuminuria or diabetic nephropathy. Therefore, the study has aimed to assess BMI, duration of diabetes, fasting lipids, serum creatinine, and microalbuminuria to control glucose levels. A cross-sectional analysis of 500 type 2 diabetic subjects was conducted among North Indian population visiting endocrine clinic of Rajiv Gandhi Centre for Diabetes & Endocrinology (RGCDE), Faculty of Medicine of J. N. Medical College Hospital, Aligarh Muslim University Aligarh, India. The patients reported to endocrine clinic in the year 1999–2012. The findings have shown that there is a significant association between HbA1c and neuropathy ($p = 0.03$), LDL-C and HbA1c ($p = 0.031$), triglyceride and HbA1c ($p = 0.000$) and type of medication and HbA1c ($p = 0.014$). However, there was no significant correlation between diabetes duration and glycemic control.

Medical Science, 2019, 23(95), 86-92

Exploring the performance of medical teachers in teaching basic procedural skills for undergraduate medical students: A qualitative research

Mohammad Reza Mansoorian, Mohammad Jalili, Shahla Khosravan, Mohammad Shariati

Competency of medical students to perform basic procedural skills is low. Among numerous factors, the role of clinical teacher is more prominent. This study was conducted in order to examine more profoundly how basic procedural skills and the underlying conditions are taught. This descriptive exploratory qualitative study was conducted on 16 academic medical teachers using purposive sampling. Findings of this study include three main themes: "supervised teacher training under controlled conditions", "active self-learning in bedside" and "official training course, safe lost opportunity to teach-learn procedural skills" and their subcategories. According to the results, participation and supervision of faculties in teaching basic clinical skills in bedside is not enough in relation to some factors. Therefore, self-learning, in spite of high risk, is recommended to the student. Necessity and course of teaching these procedures to general medical students need to be further investigated. The results of this study can be used for developing basic clinical skills for medical students.

Medical Science, 2019, 23(95), 93-99

Comparison of the clinical performances of i-gel and baska mask

Süheyla Abitağaoğlu, Ceren Köksal, Güldem Turan, Arzu Yıldırım Ar, Fatma Nur Akgün, Dilek Erdoğan Arı

Various types of supraglottic airway devices (SGAD) have been developed so far. Baska mask and I-gel are two different SGADs used in daily anesthesia practice. The purpose of this study is to compare the ease of use of Baska Mask and I-gel regarding insertion duration, success and complication rates. 30 patients with ASA I-II were enrolled in this randomized clinical study. Heart rate (HR), mean arterial blood pressure (MAP), oxygen saturation (SpO₂) and integrated pulmonary index (IPI) were monitored. SGAD insertion duration, success in the first insertion attempt, total insertion success, gastric drainage tube insertion duration, leak pressures and IPI values were recorded. Perioperative and postoperative complications were evaluated. Insertion duration was significantly longer in Baska mask group compared to the I-gel group (61.2 ± 43.4 sec vs 20.9 ± 13.8 sec; $p = 0.012$). Success rate in the first insertion attempt and leak pressures were similar. The gastric catheter insertion duration, ease and IPI values were similar. There was no difference in terms of complications. Even though higher insertion duration, Baska mask may be an alternative to I-gel in positive pressure ventilation.

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Comparison of the effect of two methods of Casting and Splinting on Ankle Sprain-Induced Ligament injuries - A Randomized Clinical Trial

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The prevalence of ankle sprain is 52.7-60.9 cases per 1000 people and is more likely to occur in young athletes. Forty percent of the patients experience impaired function for up to 6 months after the injury. The present study aimed to compare the two treatment methods of cast and splint immobilization to treat patients with first- and second-degree ankle sprain. This clinical trial study performs on 120 patients with first- and second-degree ankle sprain. Patients randomly divide into two equal groups of 60 subjects. One group treat with a cast and the other one with a splint. At the beginning of the study and 2 and six weeks after, the selected subjects were analyzed using SPSS 20 through descriptive and inferential statistics at the significance level of $p > 0.05$. In this study, patients in the splint group were able to walk normally and swelling in the affected foot was reduced in the 2-week follow-up. Within this period, the ankle joint motion in both groups returned to normal. In comparison to the splint group, the patients in the cast group experienced less pain and needed less time to rest and return to daily activities. The study results showed that, in comparison with splinting, the casting was associated with less pain in a long time, less time to rest, and quicker return to daily activities, and therefore it was cost effective.

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The effect of social skills training on reducing aggression and increasing the self-esteem of adolescent female under coverage of Welfare Hostel Centers in Tehran

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The purpose of this study was to determine the effectiveness of social skills training in reducing aggression and increasing the self-esteem of adolescent female under coverage of welfare centers in Tehran. In this research, the main hypothesis was that social skills training were effective in reducing general aggression (verbal and physical aggression) and increasing the self-esteem of adolescent under coverage of welfare centers in Tehran. Research method is experimental design with pretest and posttest design with control group. He data collection tool was GQ aggression questionnaire and Coopersmith's self-esteem questionnaire. The statistical population consisted of all adolescents aged 11 to 18 years old covered by Tehran's welfare hostel centers. The sample of the study consisted of 30 people who were selected by pre-test of AGQ aggression questionnaire and Cooper's self-esteem questionnaire. They were randomly divided into two experimental and control groups. The experimental group was exposed to social skills training during 12 sessions and each session according to the timetable of the UNICEF training suite, and the control group did not receive any training. The results indicated that social skills training did not reduce overall aggression and physical aggression and increase the self-esteem of adolescent girls, but this training significantly reduced the verbal aggression of these adolescents.

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Quality of Life during Head and Neck External Beam Radiotherapy

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Worldwide, head and neck carcinoma is sixth common cancer 2.8% of all malignancies. Radiotherapy play an integral role in management and used in approximately 60-70%. The study aimed to evaluate the radiation induced early side effects in patients receiving external beam radiotherapy. This is an observational cross-sectional survey, within 180 days from starting treatment. Forty patients were included, those attended at Oncology Teaching Center / Radiation Therapy Department, Medical City Complex. The data were collected from 1st of January 2016 to 1st of August 2016. All patients were evaluated for the early side effects, including fatigue, skin dermatitis, voice changes, xerostomia, altered taste, oral mucositis, and dysphagia. As well as the incidence of patients who required a tracheostomy and/or a gastrostomy after initiation of radiotherapy, and that of those who developed a significant weight loss (>10% of their initial weight). Dysphagia occurred in 88%, only 1 (3%) developed a grade 4 dysphagia and required a gastrostomy. Of the 40 patients, 14 (35%) had a significant weight loss $\geq 10\%$ of their initial weight. Xerostomia occurred in 85%, while fatigue recorded in 83%. Dysphagia and xerostomia were the two most common early side effects. More than half of patients with dysphagia had a grade 2, and about three-quarters of those with xerostomia had a grade 2. We conclude to spare the salivary glands and pharynx during radiotherapy plan preparations as much as possible.

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RESEARCH

Notalgia paresthetica: The histopathological findings of 17 cases

Güven GÜNEY

Notalgia paresthetica (NP) is a chronic disease characterized by sensory neuropathy which holds the skin, characterized by pruritus in which pain, paresthesia and/or hypersthesia were concomitant, and accompanied by remission and aggravation. Although NP is a common condition, it is rarely diagnosed by clinicians. For this reason, there are not too many series with many cases in the literature investigating this entity. In this study, we tried to reveal the histopathological findings of NP in the series with the highest number of cases in the literature and contribute to the clarification of the pathogenesis of the disease. Punch biopsy materials of 17 patients diagnosed with notalgia paresthetica in Çorum Erol Olçok Education and Research Hospital were included in the study. 4 mm diameter punch biopsy material was obtained from each patient. Tissues were embedded in paraffin blocks and after fixation, 5 pieces of sections with 4 micron thickness were obtained from each tissue with a microtome device. Three of the sections were stained with Hematoxylin Eosin, 1 of them were stained with Crystal violet for amyloid determination and 1 of them were stained with Periodic Acid Schiff (PAS) for the detection of fungi and vasculitis. The satined slights were examined in light microscope (Nikon Ci). Each slights were evaluated by a single pathologist in detail in terms of epidermal changes and dermal changes. Of the 17 patients included in the study, 13 (76.5%) were female and 4 (23.5%) were male. The age of the patients ranged from 19 to 63 years, with an average of 44.2 years. Epidermal changes were detected in 8 (47%) cases. The average age of the patients with epidermal changes was 31.6 years and the average age of the patients without epidermal changes was 48.7 ($p < 0.001$). Hyperpigmentation in the basal of the epidermis was seen in 3 (17.6%) cases. The two most common findings in dermis were perivascular lymphocytes and melanophages. Perivascular lymphocyte infiltration was observed in 15 (88.2%) cases while melanophages were observed in 13 (76.4%) cases. Amyloid accumulation was not detected in any of the 17 cases with crystal violet. In 2 cases lymphocytic vasculitis was observed in the dermis. NP is a chronic disease accompanied by epidermal and dermal changes. The most common epidermal change is single cell necrosis and dermal change is perivascular lymphocyte infiltration and melanin incontinence. In addition to the literature, lymphocytic vasculitis was found in two cases in our study. However, more cases and studies are needed to assess whether vasculitis is a cause or consequence of the disease.

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CASE REPORT

Aspirin Desensitization in Acute Coronary Syndrome and Concurrent Aspirin Hypersensitivity; A Case report from Saudi Arabia

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Aspirin is one of the most widely prescribed drugs in clinical practice. Patients with ischemic heart disease need prolonged therapy with this antiplatelet. Patients with history of ASA hypersensitivity are usually denied receiving this treatment. 6-steps ASA desensitization procedure was performed on a patient with asthma and ASA hypersensitivity who presented with acute coronary syndrome, after failure of alternative monoantiplatelet therapy. The patient tolerated the desensitization procedure successfully with no adverse outcomes. He is currently maintained on daily aspirin and clopidogrel with no further hypersensitivity reactions or cardiac events. This report describes the first ASA desensitization procedure in our institution. ASA desensitization is generally safe, effective, and well tolerated procedure.

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Adverse effects of ingredients available in single nasal decongestant formulation at trachea and lungs on an experimental rat model

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There is little histologic data concerning effects of nasal decongestants on respiratory tract. We aimed to put forth the effects of mostly used ingredients of nasal decongestants on trachea and lower airways of rats. Four-six months old 60 male rats were randomly categorized into 6 groups. Experimental drugs were applied to the same nostril twice daily for 8 weeks (Xylometazoline, Benzalkonium, EDTA, Sorbitol and combined drug solution). Normal saline solution (NaCl %0.9) applied for the controls. At the end, trachea and both lungs were dissected and kept in formaldehyde for histopathologic evaluation. Inflammation and bronchial edema were most common findings. All rats in sorbitol group had increased numbers of type 2 pneumocytes. Eighty percent of BAC group had increased numbers of type 2 pneumocytes. Spillover of tracheal epithelium was seen mostly in sorbitol, EDTA and combined drug groups (60%, 87.5%, 50% respectively). Bronchial smooth muscle hypertrophy was seen mostly in BAC and EDTA group (70%, 62.5% respectively). Number of goblet cells showed significant difference between control-combined drug ($p=0.025$) and control-BAC ($p=0.001$) groups. Nasal decongestants might have adverse effects such as increased airway inflammation, edema, type 2 pneumocyte numbers and epithelial desquamation mostly.

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