Volume 22, Number 94, Pages 509-601 November – December, 2018

Medical Science

About the Cover

Cancer is the third cause of death in Iran. Health literacy and self-care have a significant impact on the incidence and complications of prostate cancer. The present study was conducted to determine the relationship between health literacy and self-care with the prevention of prostate cancer in Tehran's municipality staff. The present descriptive-analytic cross-sectional study was conducted on 328 male personnel aged over 50 years selected through random sampling; required data was collected using a researcher-made questionnaire the validity and reliability of which were confirmed. SPSS 22 was used for the analysis of collected data and P <0.05 was considered as significance level. The mean literacy score of individuals was 12.22 from the maximum score of 17, and the level of literacy was significantly related with education (P = 0.0001) and employment duration (P = 0.007). The mean self-care score of individuals was 6.82 from the maximum score of 14; the self-care level of the present study showed that self-care had a significant relationship with age (P = 0.005) and duration of employment (P = 0.002), so that subjects with higher education and longer periods of employment had higher health literacy and the rate of health literacy increased with increase in age and education. Health literacy and self-care have a huge impact on health; thus, health indicators can be increased in society, making the society healthier, through improving these indices (Ref: Mohammad Hossein Taghdisi, Mahnaz Solhi, Mohammad Ali Joorsaraei Alashti, Aghafatemeh Hosseini. Investigating the effect of health literacy and self-care on preventing prostate cancer in Tehran male municipality staff in 2017. *Medical Science*, 2018, 22(94), 525-528).

RESEARCH

Identification of tissue-specific proteins of immunocompetent organs of *Sus scrofa* isolated in deuterium depleted medium

Lilia Fedulova, Anna Elkina, Ekaterina Vasilevskaya, Ekaterina Barysheva

The results of studies on the identification of tissue-specific biomolecules of *Sus scrofa* organs isolated in deuterium depleted water are presented. Analysis of the fractional protein composition was carried out using one-dimensional electrophoresis in 12.5% SDS-PAGE in PAGE in a VE-10 chamber. Proteomic analysis of the protein-peptide composition was carried out using two-dimensional gel electrophoresis (DEF) of O'Farrell with isoelectro focusing in ampholin (IEF-PAGE). The detection of proteins on two-dimensional electrophoretograms was carried out by Coomassie R-250 staining and silver nitrate. Further, the corresponding sets of peptides were studied by MALDI-TOF MS and MS/MS on the Ultraflex time-of-flight mass spectrometer (Bruker, Germany). In addition, an analysis was made of the efficiency of producing tissue-specific biomolecules using two methods of fractionation, for which extracts were obtained from the immunocompetent organs *Sus scrofa* (thymus, spleen and mesenteric lymph nodes). Extraction was carried out in a medium with a modified isotopic composition. It has been proved that extraction of proteins, of the studied samples in a solution with a deuterium content low, provides an almost twofold increase in the amount of extracted proteins and peptides. Tissue-specific proteins, directly involved in the formation of innate immunity and responsible for the primary protective reaction of the organism, are revealed.

Medical Science, 2018, 22(94), 509-513

CASE SERIES

Correlation between professional autonomy and evidence-based practice in nurses

Seyedeh Narjes Mousavizadeh, Jamileh Mohtashami

Evidence-based nursing practice in Iran has not yet been fully implemented; and there is disagreement on the factors affecting its implementation. The aim of this study was to investigate the relationship between nurses' professional autonomy by implementing evidence-based practice by them. In this descriptive correlational study, stratified random sample of 196 nurses in hospitals subordinated to Shahid Beheshti University of Medical Sciences in Tehran, Iran, were invited to the study. Data were collected in April 2017, using a standard three-part questionnaire and were analyzed with descriptive and inferential statistics. The average age of nurses participating in the study was 29.74±5.81. 97.4% of nurses were women. The majority of nurses (84.7%) had a bachelor's degree and the majority (80.6%) had between 5 and 10 years of clinical experience. 4.6% of the nurses had head positions and the others (95.4%) were normal nurses. There was no correlation between demographic characteristics of nurses and implementation of evidence-based nursing practice. Nurses professional autonomy have a significant impact on the implementation of evidence-based nursing practice ($r= 4.151$, $P< 0.05$). Based on the findings of the study with increasing levels of nurses' professional autonomy, the implementation of evidence-based practice improves and it tends to enhance the quality of nursing services. So, health care system can act by professional support from nurses, and promote the nurses' strength and independence in the performance of professional practice, in order to eliminate the gap between theory and practice in health care.

Medical Science, 2018, 22(94), 514-517

REVIEW

Internet addiction among Iranian medical students: a systematic review

Hosien Zafari, Hosein Rafiemanesh, Abbas Balouchi

Today, Internet addiction is considered one of the most important challenges of the young generation worldwide, such that determining its intensity and magnitude has become recognized as an important prerequisite for better management of this phenomenon. This study has been conducted with the aim of investigating the prevalence of Internet addiction among Iranian students. In this meta-analysis and systematic review study, national and international databanks were searched with the keywords of "Internet addiction", "students", and "Iran". In the final stage, 30 studies which had been conducted on 9161 students were introduced into the meta-analysis. The results suggested that the total prevalence of Internet addiction at moderate level is 25.32% and at severe level is 4.67%. Considering this high prevalence especially at the moderate level, it is suggested that screening tests are conducted nationally in a more purposeful way, and presentation of the necessary education for preventing and reducing Internet addiction seems to be essential.

Medical Science, 2018, 22(94), 518-524

CASE SERIES

Investigating the effect of health literacy and self-care on preventing prostate cancer in Tehran male municipality staff in 2017

Mohammad Hossein Taghdisi, Mahnaz Solhi, Mohammad Ali Joorsaraei Alashti, Aghafatemeh Hosseini

Cancer is the third cause of death in Iran. Health literacy and self-care have a significant impact on the incidence and complications of prostate cancer. The present study was conducted to determine the relationship between health literacy and self-care with the prevention of prostate cancer in Tehran's municipality staff. The present descriptive-analytic cross-sectional study was conducted on 328 male personnel aged over 50 years selected through random sampling; required data was collected using a researcher-made questionnaire the validity and reliability of which were confirmed. SPSS 22 was used for the analysis of collected data and $P <0.05$ was considered as significance level. The mean literacy score of individuals was 12.22 from the maximum score of 17, and the level of literacy was significantly related with education ($P = 0.0001$) and employment duration ($P = 0.007$). The mean self-care score of individuals was 6.82 from the maximum score of 14; the self-care level of the present study showed that self-care had a significant relationship with age ($P = 0.005$) and duration of employment ($P = 0.002$), so that subjects with higher education and longer periods of employment had higher health literacy and the rate of health literacy increased with increase in age and education. Health literacy and self-care have a huge impact on health; thus, health indicators can be increased in society, making the society healthier, through improving these indices.

Medical Science, 2018, 22(94), 525-528

Predicting preterm labor based on vaginal PH and cervical length at 22-24 weeks of gestation: A cross-sectional study

Khadije Rezaie-Keikhaie, Maryam Moshfeghi, Zohreh Kazemi, Leili Rezaie-kahkhaie, Maryam Nakhaemoghadam

The present study was conducted aimed to investigating predicting preterm labor based on vaginal PH and cervical length at 22-24 weeks of gestation. This cross-sectional study was done on 168 pregnant women between 22 and 24 weeks of pregnancy. Cervical length and vaginal PH was measured. The patients were followed up till delivery and the gestational age were recorded. Data were collected using information forms and analyzed using SPSS version 21. In this study mean age was 28.86±6 years. Mean cervical length and vaginal PH were significantly lower and

higher in women with preterm labor than women with term labor. This study showed vaginal PH and cervical length are the preterm labor predictors and the risk of preterm labor in short cervix is higher than alkaline vagina.

Medical Science, 2018, 22(94), 529-532

Investigating the Effect of Fetal Position on the Sleep-Wake State of Premature Neonates in the Neonatal Intensive Care Unit: A clinical trial study

Zahra Ameri, Fereshteh Ghaljaeiz, Ali Navidian, Mahmood Imani

One of the factors affecting the developmental and cognitive course of premature neonates is their sleep-wake state. Therefore, this study has been conducted with the aim of investigating the effect of fetal position on the sleep-wake state of premature neonates hospitalized in neonatal intensive care unit. the present clinical trial study was conducted on 90 premature neonates hospitalized in NICU of Aliebne Abitaleb Hospital in Zadehdan in 2017. The data were collected through demographic information questionnaire and Als sleep-wake behavior scale. Furthermore, Friedman statistical test was used to determine the relationship before, during, and after the intervention in the stages of the study. in this study, the maximum percentage and average time of sleeping in fetal position was related to deep sleep. Further, this position decreased the frequency and duration of light sleep, drowsiness, active wakefulness, and crying in premature neonates. However, it did not affect the duration of slow wake state in these neonates. the state of sleep-wake in premature neonates is very important, and if neglected it can result in developmental and cognitive complications in this group of sensitive neonates. Therefore, this crucial issue requires further studies. On the other hand, regarding the factors affecting the sleep-wake state of neonates including the effect of position, further studies should be conducted in order to provide the results of these studies for medical and nursing teams and minimize the developmental and cognitive complications resulting from sleep disorders in premature neonates.

Medical Science, 2018, 22(94), 533-538

Comparing the effect of tracheal tube suction using open and closed methods on hemodynamic indexes of COPD patients under mechanical ventilation

Ahmadreza Siyasari, Mozhgan Rahnama, Elham Shahrakimoghadam, Hossein Shahdadi, Abdolghani Abdollahimohammad

Suction is the most important procedure in patients under mechanical ventilation, and could be performed by two open and closed methods. In addition to considering suction principles, selection of an appropriate method for doing this could be helpful in decreasing the complications such as tissue hypoxia, heartbeat alteration, and blood pressure. The aim of this study was to compare the effect of tracheal tube suction using both open and closed methods, on hemodynamic indexes of COPD patients under mechanical ventilation. The present study is a semi-experimental one, which is performed on a single group. In this study, 48 patients affected by chronic obstructive pulmonary disease that were hospitalized in Intensive Care Unit of Amiralmomenin Ali hospital of Zabol in 2017, were selected based on accessible sample selection criteria. Number of heartbeats, systolic and diastolic blood pressure, and arterial medium pressure were assessed and recorded at three times: before, just after, and 10 minutes after suction using open and closed methods, in the first, third, and fifth days. Tracheal tube suction performed on patients with 120 mmHg of negative pressure and for 10 seconds in each time, in a random manner (via throwing coins) and with 90 minute intervals, using two open and closed methods (each method performed one time). Data were collected and analyzed using SPSS version 22. According to Wilcoxon statistical test, number of heartbeats, systolic and diastolic blood pressure, and arterial medium pressure before, just after, and 10 minutes after suction using open and closed methods, in the first, third, and fifth days, showed no statistical significant difference ($p>0.005$). Results of the present study showed that there was no statistical significant difference between two open and closed suction methods, regarding to effect on hemodynamic indexes of patients affected by chronic obstructive pulmonary disease. Comparison of this result with other studies showed a wide variation; so that, several studies indicated that closed suction method is preferred due to maintenance of most of hemodynamic indexes in comparison to open suction method.

Medical Science, 2018, 22(94), 539-543

Comparison of the effect of ice massage in the LI4 and SP6 on Primary Dysmenorrhea: A blinded clinical trial

Zeinab Younes Barani, Maryam Shahraki

The purpose of this study was to compare the effect of ice massage in Hugo point and spleen point 6 on the severity of primary dysmenorrhea in students. This study was counducted on 90 female students residing in dorms. The instruments used in this study were Visual Analog Scale (VAS) for pain and a watch. The mean of pain intensity in the two groups of ice massage on the Hugo point and ice massage on spleen point 6 was significantly reduced after the intervention ($P<0.05$). According to the results of this study, ice massage on the Hugo point and spleen point 6 significantly decreased the pain intensity in the primary dysmenorrhea.

Medical Science, 2018, 22(94), 544-548

Effect of magnesium sulfate on middle cerebral, umbilical artery and uterine arteries Doppler parameters in pregnancy up to 32 weeks

Salavati Jamileh, Shafaat Masoumeh, Emamzadeh Nezamaddin, Salavati Jalileh, Ghanei Gheshlagh Reza, Borna Sedigheh, Hantoushzadeh Sedigheh, Ghotbizadeh Fahimeh, Sabzevary Masoumeh Sadat, Khazardoost Soghra

Effect of Magnesium sulfate ($MgSO_4$) on cerebral vessels are still controversial and it is unclear whether it reduces cerebrovascular events. Studies in this area are still ongoing. The aim of this study was to assess the effect of $MgSO_4$ on fetal middle cerebral artery, umbilical artery and uterine artery using Doppler parameters in pregnancy up to 32 weeks. This was a quasi-experimental investigation in which we evaluated pregnant women up to 32 gestational weeks who were admitted in Imam Khomeini Hospital, Tehran University of Medical Sciences between April 2016 and May 2017. Participants were admitted and after baseline evaluations, they were entered in the study. Before and after administration of Magnesium sulfate Doppler evaluation of uterine (UA), umbilical (UMA) and middle cerebral artery (MCA) performed for pulsatility index (PI), resistance index (RI) and systole/diastole ratio (S/D). The results were compared by paired T-test and Wilcoxon test. Finally, 70 patients enrolled in this study. The mean age of participants was 32.69± 6.01 years. The mean gestational age was 29.84± 1.56 weeks. Umbilical artery pulsatility index (UPI) was significantly decreased after $MgSO_4$ injection ($P= 0.001$), umbilical resistance index in umbilical artery (URI) and S/D also were significantly decreased ($P<0.0001$). In fetal MCA Doppler, middle cerebral artery pulsatility index (MPI) ($P<0.0001$) and middle cerebral artery resistance index (MRI) ($P<0.0001$) were increased significantly after $MgSO_4$ injection and peak systolic velocity (PSV) had not changed significantly. In uterine artery Doppler, uterine artery pulsatility index (UTPI) and uterine artery resistance index (UTRI) were significantly decreased after drug injection ($P<0.0001$ in both). We showed that there was a significant difference between MPI/UPI ratio before and after administration of maternal $MgSO_4$ (0.73± 0.31 vs. 0.64± 0.24; $P<0.0001$). Intravenous administration of magnesium sulfate in pregnant women up to 32 gestational weeks resulted in a decrease in PI and RI in umbilical artery and uterine artery, and increased in MCA Doppler indices.

Medical Science, 2018, 22(94), 549-552

Health Care Strategic Purchasing from a Consumer Perspective: A Qualitative Study and a guide for policy makers

Seyyed Mostafa Hakimzadeh, Aziz Rezapour, Peivand Bastani, Sirous Panahi, Ali Tahernajad

Developing countries have long given special attention to the strategic purchasing through health care buyer organizations on the grounds that help their health systems work propitiously. Notation were indeed made on the consumer here as one of the most important perspectives albeit, largely

ignored or forgotten in practice which it would result in patients, as the consumers of health sectors, do not have enough coverage. Therefore, the aim of the study was to put forward a piece of academic research on axis affecting the strategic purchasing of health services from the perspective of consumers that I would like to undertake. The present study was a qualitative one which applies Delphi technic in 2017. The participants were non-random and targeted conducted to identify issues affecting the strategic purchasing of health services from the perspective of consumers. The study population consisted of a patients group and professionals with a PhD in management science and health economics, director of health insurance or experts in the field of medical sciences and insurance with qualification at postgraduate and experience at least 5 years in the health insurance and health services and scientific or PhD degree holders in the field of health management and economics. Experts voted for consumers' presence at all levels of health services. While, the elderly (over 65 years), pregnant women, people under 18 and people with incomes below the median area income are a priority in receiving financial benefits or basic coverage. Taking all evidence into account it is recommended that the participation of citizens and the rights of patients should be the linchpin of strategic purchasing. Accordingly, it is approved to provide legal requirements necessary for the citizens in all sectors of health care system at all levels so that they could be acceptable by all operators of the health system, including professionals, insurers and lawmakers. Legal requirements need to be created to enable citizens to take measures to reflect documentary guidelines in the law.

Medical Science, 2018, 22(94), 553-559

The employed women's experience of spousal violence: A qualitative study

Hajar Noorisanchooli, Elahe Asadibidmeshki, Mozhgan Rahnama, Maryam Jahantigh Haghighi

Spousal violence (domestic violence) is the most common type of violence against women. Violence against women is not merely a health problem affecting the family members. Rather, it is also an extensive serious problem associated with social and public health. Violence against women seriously threatens their quality of life and their children. in the present qualitative study using conventional content analysis approach, the women's experiences of spousal violence was investigated. Ten women were chosen through purposeful sampling method. The data collection method was deep semi-structured interview using open-ended questions. The data analysis was performed through conventional content analysis approach. The data analysis culminated in extraction of three main classes and eight subclasses including domination (deprivation of privacy, deprivation of freedom in personal affairs), negligence (repressing beliefs, sense of loneliness in the marital life, the woman's deprivation of spouse's expression of affection, neglecting the woman's desires in sexual relationship, no precedence of spousal role, compulsion to fill the emotional vacuum by the child), and evading divorce consequences. The results of the present study suggested that the employed women were subject to their spouse violence, however in order to prevent negative social consequences against this violence, they indicated a passive behavior and did not consent to terminating their marital life through divorce. Thus, it is recommended that the necessary training be given by authorities with regards to the proper method of interaction with spouse.

Medical Science, 2018, 22(94), 560-565

The predictive role of Hyperlipidemia in the incidence of ACS in patients referring to Shahidzadeh Hospital in Behbahan in 2016 -2017

Hadi Mashali, Fatemeh Toleideh, Rezvan Rahmani, Pouriya Darabiyan, Mostafa Madmoli

Among chronic diseases, cardiovascular disease, especially acute coronary syndrome (ACS), is the most common and most important cause of death in most countries. This study was conducted to determine the predictive role of Hyperlipidemia (HLP) in the incidence of ACS in patients referred to Shahidzadeh Hospital in Behbahan in 2016 and 2017. The present study is a retrospective cross-sectional study. 926 cases of patients who had ACS or a history of this disease and were referred to Shahidzadeh hospital in Behbahan in 2016 and 2017 were studied. The inclusion criteria included all ACS patients in any age group and sex with any diagnosis or history of ACS in their case, and other records that had a medical diagnosis other than the disease, cases without ACS history, and cases Incomplete (n = 75) were excluded. Data were then entered into SPSS software version 18. Data were analyzed by descriptive statistics including enumerated tables, mean, standard deviation and variance, and analytical tests including Chi-square and Chi-square Pearson, T-test, ANOVA and at the significant level of P <0.05. The sample consisted of 926 ACS with an average age of 17.15 ± 59.00. Of these, 402 (43.4%) were males and the rest were females. In terms of education, the highest number of people was 45.4% illiterate. In terms of occupation, the highest percentage was unemployed (42.6%). There was a significant correlation between ethnicity and cholesterol (P = 0.01). Also, there was a significant relationship between education level and HDL (P = 0.0001). Regarding the high level of LDL, cholesterol and triglyceride levels in this study, which are three risk factors for acute coronary syndrome, it is better to plan to increase the level of health of patients with acute coronary syndrome and to educate these patients in the mass media in the order Work of the Ministry of Health. Therefore, these patients need special attention to identify and treat as soon as possible.

Medical Science, 2018, 22(94), 566-570

RESEARCH

The Effects of Thickness Changes in Different Composites on Translucency, Opalescence, and Masking Efficacy

Beyza Unalan Degirmenci, Alperen Degirmenci

The aim of this study is to evaluate the effects of thickness increase in nanohybrid and microhybrid composites on translucency, opalescence and masking efficacy. For this study, a total of 72 composite discs with thicknesses of 1, 1.5 and 2 mm were prepared from nanohybrid and microhybrid composites. Disk measurements were made with the aid of a spectrophotometer and translucency parameter (TP), opalescence (OP-BW) and masking efficacy (ME) were calculated. The decrease in the values of TP and OP-BW and increase in the values of ME were observed with thickness increase in both microhybrid and nanohybrid composites. Moreover, while statistically significant positive correlation was detected between TP and OP-BW, it was also detected that ME and TP and ME and OP-BW were statistically significant between each other but negative correlation was detected. The thickness of composite materials directly affects the aesthetic properties of restorative materials.

Medical Science, 2018, 22(94), 571-576

CASE SERIES

Health Services Utilization and Responsiveness: A comparison of Slum and Non-slum Regions in Tabriz, Iran

Jafar Sadegh Tabrizi, Mostafa Farahbakhsh, Homayoun Sadeghi Bazargani, Mohammad Saadati, Mina Golestani, Akram Zakeri

Health services utilization and responsiveness is a variable that can be affected by the location of habitat. This must be considered in planning and employing a system of proper service delivery. The aim of this study was to compare health care utilization and responsiveness between Akhmaqaya Slum Region (ASR) and Tabriz Representative Sample (TSR), Iran. A cross-sectional household study, using cluster random sampling, (n= 582 households) was conducted in 2015. Akhmaqaya slum region and Tabriz city were selected for data collection. A validated questionnaire was used for data collection. Data were analyzed by STATA 13. Household's socio-economic status was significantly high in Tabriz. Moreover 7.2% of Akhmaqaya slum households were not able to use health services especially medication in their last year due to the high costs when compared with 3.3% in Tabriz. Results showed that 18.5% of Akhmaqaya slum households and 6.4% of Tabriz households had no insurance coverage. Services quality was rated to be average and bad by 40% of households. Responsiveness level in both regions was low and significant difference

was not observed between the two regions. it was concluded that socio-economic differences seem to contribute in the health services utilization inequities between Akhmaqaya slum region and Tabriz as a sample. As well as low insurance coverage and financial protection, led to more refuse in health services utilization in slum households. It sounds that health policy in Iran must concentrate more on redesigning health provision structures to eliminate inequities originated by the difference in regions of living.

Medical Science, 2018, 22(94), 577-582

The cost effectiveness analysis of mechanical thrombectomy with venous thrombolytic compared with venous thrombolytic alone in patients with an acute stroke in Iran

Aziz Rezapour, Seyyed Mostafa Hakimzadeh, Peivand Bastani, Sirous Panahi, Ali Tahernajad

Stroke is the most common cause of mortality and illness among neurological patients. In recent years, novel significant technologies have been developed to improve the treatment of patients with stroke, such as mechanical thrombectomy or arterial thrombolytics along with intravenous thrombolytics. However, its economic impact in developing countries has not yet been assessed. The aim of this study is to put forward a piece of academic research on the cost-effectiveness of the two above-mentioned therapeutic methods in patients with severe stroke in Iran. The Markov model contained three modes for the evaluation of the cost-effectiveness analysis of mechanical thrombectomy with intravenous thrombolytics compared with intravenous thrombolytics alone in patients with an acute stroke in Iran. The cycle was a one-year study and life time frame. The input data of the model included clinical, epidemiological and cost data. A series of patients with stroke who referred to a referral cardiac hospital in Tehran during one month period were used as sample. The cost of these patients was extracted by referring to their medical records. One-way sensitivity analysis and Tournado were exerted to measure the impacts of uncertainty inputs of the model. A discount rate of 5% was used. Ethics approval was obtained from the local institutional review board. A total of 50 patients with acute stroke were enrolled who referred to the referral hospital. Despite the fact that the thrombectomy therapy with intravenous thrombolytics costs 320565 dollars, the additional cost could be justified in terms of benefits that participant would receive of 2.43 QALY. In addition, in the intravenous thrombolytics group, 1,441 QALY is generated in the value of 270,410 dollars. The incremental cost-effectiveness to gain a QALY was 49171 dollars. Taking all evidence into account, the variables of thrombectomy efficacy, discount rate, and thrombectomy cost should have the most impact on cost-effectiveness outcome. Thrombectomy therapy with intravenous thrombolytics is a cost-effective measure for patients with acute stroke. National research and cultivation in this area can greatly reduce the burden of stroke.

Medical Science, 2018, 22(94), 583-588

Comparing the Compliance of Brain CT Scan Interpretations of Emergency Medicine Physicians with Radiologists Reports

Mohsen Ebrahimi, Masoud Pezeshki Rad, Seyed Reza Habibzadeh, Alireza Farzadpour, Neema John Mehramiz, Mahdi Foroughian

Since access to radiologists at any time of a day is not possible in all health centers, the ability to evaluate and interpret brain CT scans is necessary for emergency medicine physicians. The aim of this study is to compare the efficacy and functionality of brain CT scan interpretation of the emergency medicine team. In this observational, analytical and sectional study, brain CT scans of 150 patients with head trauma were examined and compared during six months in Hashemi Nejad hospital. Emergency physicians have recorded their interpretations of the disease after that Radiologist recorded their diagnosis by using PACS system simultaneously or after a short time. To specify the degree of compliance of these CT scans interpretations, the kappa coefficient used. Reports of Brain CT scan by Emergency physicians consistent with the radiologist findings in 131 reports out of 150 reports (87.3%). In 19 cases (12.6%), the results were inconsistent; in 11 cases (7.3%) the findings were false negative, and in 8 (5.3%) findings were false positive. The obtained kappa coefficient was 0.7 (P <0.001), which indicates that the agreement was acceptable. The results indicate the acceptable skill of emergency physicians in the interpretation of brain CT scans. However, due to its high sensitivity and to minimize errors in clinical interpretation, teaching basic concepts of radiology to emergency physicians by professors of medicine or radiologist seems necessary.

Medical Science, 2018, 22(94), 589-592

Is there any difference in lateralization in epithelial ovarian cancer cases?.

Gorker Sel, Anıl T Cakır, Muge Harma, Mehmet I Harma

Whether there is a right or left lateralization difference in cancer involvement in double-sided organs has become a topic of interest in recent years. In addition, the density of cancer metastasis to the right or left lymph nodes has become a subject of inquisition. Our aim in this study is to retrospectively investigate differences in right- or left-sided ovarian cancer incidence. In the Gynaecological Oncology Clinic of Zonguldak Bülent Ecevit University, 96 patients with epithelial ovarian cancer who were followed up between 2008 and 2017 were retrospectively noted as having right or left ovarian involvement or a tumour mass with right or left overgrowth. A prominence of left ovarian involvement was observed in our study results. Especially when patients in the first stage of cancer, FIGO stage 1A, were examined, it was obvious that epithelial ovarian cancer tends to commence in the left ovary rather than the right ovary. There is a need for prospective studies with multidisciplinary studies including immunohistopathology to investigate hypotheses such as hormonal susceptibility, which can be postulated as an explanation for the higher frequency of left vs right ovary involvement in EOC.

Medical Science, 2018, 22(94), 593-595

A randomized placebo-controlled trial on the effects of "*Pistacia atlantica*" on quality of life in patients with functional dyspepsia

Mahdiyehsadat Eftekharafzali, Mohammad Javad Zahedi, Mitra Mehrabani, Bijan Ahmadi, Haleh Tajadini

Functional dyspepsia (FD) is one of the most common problems in the world, which affects the quality of life (QoL). In Traditional Persian Medicine, *Pistacia atlantica* has beneficial effects on gastrointestinal disorders and on treating FD; therefore, it can improve QoL. This study aimed to investigate the effects of "*Pistacia atlantica mutica*" (Baneh) on the improvement of the quality of life patients with Functional Dyspepsia. This randomized double blind placebo-controlled trial was carried out on 119 patients (18-60 years of age) with functional dyspepsia (between May 2016 and September 2016) in the research and referral center of gastroenterology and hepatology of Afzalipour Hospital affiliated to Kerman University of Medical Sciences. Subjects were randomly divided into intervention (n=61) and placebo (n=58) groups. Participants received the treatment twice a day (500 mg capsules containing 350 mg *Pistacia atlantica* resin plus 150 mg Sugar) in the intervention group, and 500 mg capsules of placebo containing 350 mg starch powder plus 150 mg sugar) in placebo group for 4 weeks and then were followed up for 1 month. The QoL was assessed using Nepean Dyspepsia Index (NDI) short questionnaire to evaluate tension, daily activities, eating, knowledge, and work in the fourth week intervention and 1 month after the intervention. Fifty-three patients in the *Pistacia atlantica* group and 48 patients in the placebo group completed the study. There were no relevant differences in the baseline characteristics, chief complaint and provocation factors between the groups. Mean age was 38.30±12.57 and 44.85±13.08 years in *Pistacia atlantica* and placebo groups respectively (p=0.66). Tension, daily activities, eating/drinking, knowledge/control and work/study significantly improved in *Pistacia atlantica* group in the 4^{th} and 8^{th} weeks compared to the placebo group. Mean QoL score was (3.15±0.23 vs 5.24±0.34) at the 4^{th} week and (3±0.18 vs 5.24±0.31) at the 8^{th} week in pistica and placebo groups, respectively (p≤0.001). This study revealed that *Pistacia atlantica mutica* significantly improved QoL in patients with functional dyspepsia. No serious side effects were detected.

Medical Science, 2018, 22(94), 596-601