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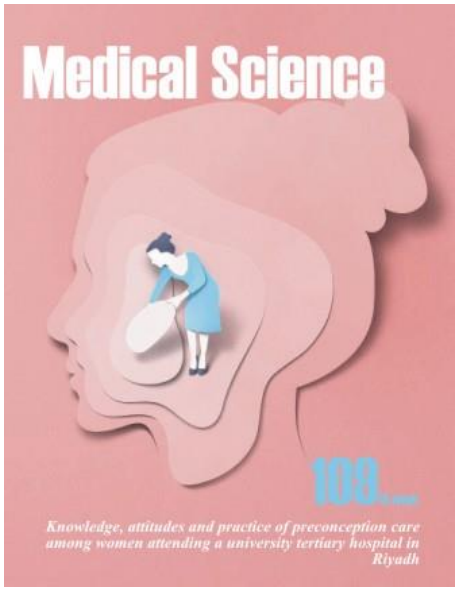
Medical Science

About the Cover



Introduction: Pregnancy in reproductive age is associated with many threats. Preconception care has since been implemented to encourage wellbeing during conception and enhance pregnancy-related outcomes. The purpose of this research was to evaluate the degree of awareness, behaviors and activities relevant to preconception care among women attending prenatal care appointments. *Methodology*: A cross-sectional analysis undertaken at King Saud University Medical City from April to December 2020. A questionnaire was administered to 1135 respondents aged 18 to 45 years. The questionnaire consisted of four areas, evaluating socio-demographic data and awareness, perceptions and experience of preconception. *Results*: The mean (SD) behaviors, practice and awareness scores were [11.37(3.94%), 15.39 (2.12%)/ and 10.13(2.30%)] respectively. Overall, 98.5 per cent of respondents had positive perceptions, 45.2 per cent had good methods and 51.9 per cent had good understanding of preconception treatment. *Conclusion*: The majority of women had moderate awareness and a neutral approach to preconception treatment. Educational intervention focused on a wellbeing belief paradigm is also suggested in order to enhance women's education and perceptions and establish preconception habits in these persons. (Ref: Sabr YS, Al-Zahrani NF, Labani R, Alrasheed R. Knowledge, attitudes and practice of preconception care among women attending a university tertiary hospital in Riyadh: Cross sectional study. *Medical Science*, 2021, 25(109), 508-519).

ANALYSIS

Knowledge, attitudes and practice of preconception care among women attending a university tertiary hospital in Riyadh: Cross sectional study

Yasser Sabr, Noor Faraj Al-Zahrani, Reem Mohammed Labani, Reem Afahad Alrasheed

Introduction: Pregnancy in reproductive age is associated with many threats. Preconception care has since been implemented to encourage wellbeing during conception and enhance pregnancy-related outcomes. The purpose of this research was to evaluate the degree of awareness, behaviors and activities relevant to preconception care among women attending prenatal care appointments. *Methodology*: A cross-sectional analysis undertaken at King Saud University Medical City from April to December 2020. A questionnaire was administered to 1135 respondents aged 18 to 45 years. The questionnaire consisted of four areas, evaluating socio-demographic data and awareness, perceptions and experience of preconception. *Results*: The mean (SD) behaviors, practice and awareness scores were [11.37(3.94%), 15.39 (2.12%)/ and 10.13(2.30%)] respectively. Overall, 98.5 per cent of respondents had positive perceptions, 45.2 per cent had good methods and 51.9 per cent had good understanding of preconception treatment. *Conclusion*: The majority of women had moderate awareness and a neutral approach to preconception treatment. Educational intervention focused on a wellbeing belief paradigm is also suggested in order to enhance women's education and perceptions and establish preconception habits in these persons.

Medical Science, 2021, 25(109), 508-519

CASE REPORT

Bilateral nasal myxoma in 22 years psychiatric male - a case report

Reda Daoud, Khalid Alqarni, Malak satam Alanazi, Ahad M Almohammadi, Sultan alharthy

Introduction: Myxoma is a benign tumor with slow-growth and rare presence in the maxilla and mandible. *Case presentation*: We report a case report of a 22-years old male who presented with a persistent bilateral progressive nasal obstruction, and he was diagnosed as a bilateral allergic fungal polyp; he showed no improvement on corticosteroid treatment. Functional endoscopic sinus surgery (FESS) used to treat the patient, which is known for using in the treatment of chronic severe conditions of the nasal sinuses, antrochoanal polys, and sinonasal tumors. FESS was found to be efficient in the treatment of nasal myxoma, with complete removal of the tumor with no recurrence on follow-up. *Conclusion*: complete removal of the tumor with no recurrence on follow-up and longer follow-up should be established to ensure no long-term recurrence.

Medical Science, 2021, 25(109), 520-524

RESEARCH

The combined use of AgNORs and oral mucosal keratinization for early prediction of cytological atypia associated with the use of smokeless tobacco

Hussain Gadelkarim Ahmed, Amel B El Hag, Naif K Binsaleh, Gamal Eldin Mohamed O Elhussein, Rania Abdeen Hussain Abdalla, Malik Asif Hussain, Mohamed Ahmed Babikir I Bealy, Emad Abboh A Abboh, Hisham Sherfi

Background: Oral use of smokeless tobacco has been documented as a prime cause of oral cancer. Thus, the present study aimed to evaluate the merit of combined use of AgNORs and oral mucosal keratinization for early prediction of cytological atypia associated with smokeless tobacco use. *Methodology:* This was a case-control study that included 96 participants, 48 persons were smokeless tobacco users ascertained as the case group, and 48 individuals were non-tobacco users affirmed as a control group. All study subjects were selected from the Hail area, Saudi Araba, from October 2019 to January 2020. Cytological materials were obtained from all participants by scraping of oral mucosa using a wooden tongue depressor. *Results:* Mean counts of AgNORs of > 2 dots were identified in 25/48(52%) of the cases and only one (2%) of the controls. Keratinization was detected in 33/48(67%) of the cases and 6/48(12.5%) of the controls. Out of the 25 cases with abnormal AgNORs count, 23/25(92%) were detected with keratinization. *Conclusion:* The combined use of AgNORs and oral mucosal keratinization is useful for the early prediction of cytological atypia associated with smokeless tobacco use. Oral use of smokeless can cause oral mucosal keratinization and cellular proliferation.

Medical Science, 2021, 25(109), 525-531

ANALYSIS

Stress among parents of amblyopic children in Saudi Arabia

Noura Alkulaib, Mareyah Abdulrahman Alshaikh Husain, Fahad Al Wadani

It found that stress is significant in mothers of children with amblyopia. In Saudi Arabia the prevalence of amblyopia among children ranges from 1.3 to 3.9%. The amblyopic child's attitude toward treatment is a source of stress for parents. *Purpose:* To establish the relationship between stress and having an amblyopic child among parents in Saudi Arabia using the Perceived Stress Scale. *Methodology:* A descriptive cross-sectional study was conducted among 100 parents who has an amblyopic child from July to

August 2020. The Study was distributed in two tertiary eye care hospitals in Al Ahsa, in the Eastern province of Saudi Arabia. *Result:* It showed that Refractive errors were the most frequently reported cause of amblyopia among children by 53%. Most of the children treated by combination of occlusion and glasses with only one child underwent surgery and 3 children had no treatment. We found Moderate to high stress level among 90.4% of mothers compared to 88.2% of fathers but were not statistically significant. High level of stress (93.8%) detected among parents whose children treated by occlusion therapy compared to 66.7% of those who did not receive this kind of treatment. *Conclusion:* Our study showed moderate level of stress (80%) in the majority of parents of amblyopic children compared with only 10% of them showing high level of stress but was not statistically significant (P=.790).

Medical Science, 2021, 25(109), 532-537

A study of the cardiovascular effects of the direct acting anti-hepatitis C virus drugs by cardiac magnetic resonance imaging

Amr Gamal Shawky, Diaa Kamal1, Yasser Elkashlan, Ahmed S Ibrahim, Ossama Ashraf Ahmed, Tarek M K Abdeldayem

Objectives: Chronic Hepatitis C Virus infection is highly prevalent in Egypt. The introduction of the new direct acting antivirals has revolutionized the treatment of HCV patients. Our study aimed to evaluate the effects of these drugs on the cardiovascular system, using cardiac Magnetic Resonance Imaging (CMR). *Methods:* Twenty-one treatment naïve adult patients with no prior history of cardiovascular disease and free from cardiovascular risk factors were included in the study. Each subject had a negative treadmill stress ECG test before starting treatment. *Results:* Treatment with direct-acting antivirals (DAAs) had no effect on LV dimensions, biventricular volumes, and functions. There was also no difference noted regarding resting segmental wall motion abnormalities (RSWMA) by Trans-Thoracic Echocardiography (TTE) and CMR and late gadolinium enhancement (LGE) by CMR. *Conclusion:* The DAAs used in the national protocol for HCV treatment in Egyptian patients have potentially good cardiac safety profile. There were no changes in biventricular functions by TTE or CMR and no myocardial fibrosis detected by CMR in the studied patients. These highly effective drugs potentially had no cardiotoxic effects in Egyptian patients.

Medical Science, 2021, 25(109), 538-546

RESEARCH

Physical and psychological response to exercise training in chronic kidney disease patients: A quasi-randomized controlled trial

Ahmed Abdelmoniem Ibrahim, Omar W Althomali, Hisham M Hussein, Mohamed R Atyia, Mohamed T Eldesoky, Mervat Gamal, Walid Kamal Abdelbasset

Chronic kidney disease is an important public and medical problem, as it is associated with high risks of complications which lead to a reduction in physical capacity, psychological status, and quality of life. This study aims to evaluate the impact of a 10-week exercise program, containing 30 minutes of moderate-intensity aerobic exercise training on physical capacity, psychological status, and quality of life in chronic kidney disease patients (CKD). This quasi-experimental study was applied for chronic kidney disease patients. Physical capacity, psychological status, and quality of life were assessed at baseline and after 10-weeks of aerobic training (cycle ergometer), it was performed three times per week for 10 weeks on alternate days with hemodialysis sessions. Thirty-two CKD patients (16 aerobic group) and (16 control group) with demographic data (age, p=0.313, sex, p=0.288, body mass index, p=0.825, CKD duration, p=0.689, and education levels, p>0.05) were evaluated pre and post 10 weeks of aerobic exercise training sessions; there was a significant improvement in the outcome measures of the aerobic group in (6-MWT, p=0.024, TUG-s, p<0.001, QOL-mental health, p=0.002, QOL-role functioning/ emotional, p=0.012, HAM-DRS, p<0.001, and HAM-ARS, p<0.001), while, no significant changes were detected in the control group. It was concluded that low-intensity aerobic exercise program has positive effects on the physical capacity, Psychological status and, life quality of patients with chronic kidney disease.

Medical Science, 2021, 25(109), 547-555

ANALYSIS

Prevalence and risk factors for irritable bowel syndrome among high school female students in northern borders region, Saudi Arabia

Entsar Owaid Alanazi, Wafa Owied Alshammri, Sabry Mohamed Hammad, Amal Elwan Mohammed

Irritable bowel syndrome is one of the physicians' most common conditions and accounts for approximately 12% of primary healthcare units' visits. *Objectives*: This study aimed to assess the prevalence and risk factors of irritable bowel syndrome among high school female students in the Northern borders region, KSA. *Methods*: A cross-sectional study was carried out during the second academic semester, April 2019 to December 2019. The investigator used a self-administered questionnaire that employed Rome 4 criteria and previously tested for validity and reliability. Data collected were analyzed using SPSS version 24 using Chi-square test and Fisher exact tests for significance. *Results*: The overall prevalence of IBS among the studied group is 54.8%. School grade, marital status, Family income, Family number, Parents status (p<0. 001) were significantly related to IBS. Lifestyle factors such as physical inactivity and poor consumption of fruits and vegetables were significantly associated with irritable bowel syndrome among adolescents. *Conclusion*: IBS is a prevalent condition that necessitates medical care. Family physicians need

screening for IBS in a different setting. Raising awareness on healthy lifestyles among adolescents is highly recommended to combat IBS and other lifestyle diseases.

Medical Science, 2021, 25(109), 556-564

CASE REPORT

Lichen nitidus: A case report of generalized form

Malak A Aldahasi, Walaa A Takrooni, Khalid A Al hawsawi

Lichen nitidus (LN) is a relatively rare chronic inflammatory skin condition of unknown etiology. Here-in we present this is a 28-year-old male patient presented to the outpatient clinic complaining of very itchy persistent skin lesions which have been observed for 6 months. Skin examination revealed multiple widespread, non-scaly, skin colored, tiny papules all over his body including face, neck, chest, back, abdomen and upper parts of all extremities. Hair, nail and mucous membranes were all normal. Skin biopsy was taken from the skin lesion. The epidermis showed mild spongiosis. The dermis showed patchy mononuclear cellular infiltrate in the upper dermis and vacuolar degeneration of the basal layer. Diagnosis of lichen nitidus was made. The patient was treated by topical corticosteroid and narrow-band UVB Phototherapy with excellent response. Our case is unusual in that it is a generalized form of LN with severe pruritus.

Medical Science, 2021, 25(109), 565-568

ANALYSIS

Designing a national eye injury registry model for Iran

Farkhondeh Asadi, Nahid Ramezanghorbani, Sohrab Almasi

Background: The management of data related to eye injury can improve the process of care and treatment, and the implementation of preventive programs. The use of a national eye injury registry model greatly contributes to the management of eye injury data, prevention of these injuries, improvement of care, and cost control. *Objective*: This study aimed to propose a national eye injury registry model for Iran. Methods: This was an applied descriptive study. Based on a review of articles and information sources, and a comparative study of national eye injury registries in pioneering countries, a national eye injury registry model was designed for Iran. After confirming the reliability and validity of the questionnaire, the proposed model was given to ophthalmologists in a two-stage Delphi technique, and their comments were applied to the final model. *Results*: The proposed national eye injury registry model has six dimensions: goals, structure, data sources, minimum dataset, standards, and processes. *Conclusion*: As a registry is essential to the management of eye injury data, the proposed model can improve the management of the data flow between the cooperating organizations, facilitate the adoption of preventive strategies, and thus help reduce and prevent eye injury.

Medical Science, 2021, 25(109), 569-576

Comparison of the diagnostic precision for ultrasound and mammogram in dense breasts tissue of young females

Mahmoud H. Alkhasawneh, Asma'a Al-Mnayyis, Maria Alawi, Ekatereena Obaisat, Eman M Alzyoud

Background: Globally, breast cancer accounts for a third of womens' cancer cases. It is experinced in 1-3% of females with clinical breast findings, negative mammogram and ultrasound. *Aim*: This retrospective study aimed to compare the diagnostic precision of mammogram and ultrasound in detecting breast malignancy. *Patients and methods*: 332 females from the southern region of Jordan 34-75 years old were enrolled in the study. They were subjected to clinical examination, mammogram, ultrasound and histopathological study for their breast masses at Alkarak teaching hospital. The differential diagnostic precision of both imaging modalities were analyzed in terms of breast density and patient's age. Based on the breast imaging reporting and data system, mammograms were analyzed into five diagnostic categories (1-5), four grades of breast tissue density (I-IV), while, ultrasound diagnosis was based on five diagnostic categories of the same system. *Results*: The histopathological examination showed 155 (19.4%) malignant and 177 (4.5%) benign lesions. All malignancies were diagnosed by ultrasound and mammogram, respectively. The obtained results showed statistically significant difference of sensitivies and specificities between the overall ultrasound and mammogram ($P<0.05$). Regarding breast tissue density, mammogram sensitivity was 83.3% and 0% in grade I and grade IV, respectively. It was 66.7% and 40% in the same grades for ultrasound. *Conclusion*: The diagnostic precision of ultrasound in differentiating between benign and malignant lesions was significantly higher than mammogram in young Patients with clinical breast findings and dense breast tissue.

Medical Science, 2021, 25(109), 577-583

Assessment of knowledge and attitude of type 1 diabetes mellitus among primary and intermediate school staff in Al Ahsa, Saudi Arabia

Abdulhameed A Al-Bunyan, Sarah M Alhammad, Zahra A Alhammad, Hamed A Al Abad, Kawthar A Al Jamaan

Background: Diabetes mellitus type 1 (T1D) is a metabolic disease. Those diagnosed with T1D, need special care, especially children, to prevent complication and provide proper care to T1D children, school staff they should have a high level of awareness and

knowledge to deal with diabetic children because they are responsible for them in school. Evaluating awareness of T1D and the level of knowledge of school staff will help to increase awareness of dealing with diabetic children. To determine school staff's diabetes training needs and their ability to provide suitable care to their diabetic students, This study is aimed to assess the knowledge, attitudes, and management practices related to T1D in children among intermediate and primary school staff in Al Ahsa. *Methods:* A cross-sectional study was conducted among primary and intermediate school personnel in Al Ahsa, Saudi Arabia from October to November 2020. The data were collected by using an online questionnaire and a self-administered questionnaire for type 1 Diabetes mellitus used. Scientific Package of the Social Sciences version 22 (SPSS) was used to enter and analyze the data. *Results:* The sample size was 398; the general awareness level regarding T1D is good in (53.8%) participants. Only (25.6%) had a good level of awareness about complications associated with the disease while awareness of management practice regarding T1DM was good among (44.7%). *Conclusion:* In this study, the general knowledge about type 1 diabetes mellites present among the primary and intermediate schools staffs in Al Ahsa however, they had limited awareness regarding diabetes complications and management. Therefore, the study recommended the need for a training program to be created to increase the awareness of school staff about diabetes and how to manage or deal with students who have diabetes, especially in emergency cases.

Medical Science, 2021, 25(109), 584-594

RESEARCH

Prediction of the critical cancers in Northern Saudi Arabia

Abdelbaset Mohamed Elasbali, Manar G. Shalabi, Shawgi A. Mohammed, Anass M. Abbas, Fauwaz Fahad Alrashid, Saleh Hadi Alharbi, Amjad Alyahyawi, Hussain Gadelkarim Ahmed

Background: Saudi Arabia is witnessing a rapid increase in the overall epidemiology of cancer. Therefore, the present study aimed to determine the key cancers in Northern Saudi Arabia. *Methodology*: In this cross-sectional study, 450 Saudi volunteers were employed throughout the period from October to November 2020. Dates from participants were arbitrarily nominated from the noncombatants living in the municipal of Hail. *Results*: Obtainable of 450 participants, (39.3%) sued that they have close families with cancers, counting (60%), (28.2%), (7.9%), (4%), (2.3%), (1.7%) respectively. *Conclusion*: The furthermost communal stated cancers via the contestants are leukemias, lung, breast, stomach, colorectal, and others. The status of cancer acquaintance and mindfulness is scarce at the municipal sordid. Additional movements are considered obligatory, together with testing the conceivable menace features for the stated cancer and hovering the inhabitant's health-education and cancer mindfulness.

Medical Science, 2021, 25(109), 595-601

ANALYSIS

Comparison of phacoemulsification + IOL implantation and silicone oil removal in one session with performing these operations in two sessions

Fereydoun Farrahi, Mostafa Feghhi, Habibollah Kakaei

Silicone oil injection at the end of vitrectomy is common. Cataracts are also common when silicone oil needs to be removed from the eye. The question arises; should we remove the silicone oil first and at least two months later perform cataract and intraocular lens (IOL) implantation surgery? Or do two operations at the same time? The aim of the present study was to compare these two methods. Patients who had previously undergone vitrectomy and silicone oil injection and needed cataract surgery and silicone oil drainage were divided into two groups. In the first group, pars plana silicone oil removal was done first and at least two months later, cataract+IOL surgery was performed. In the second group cataract + IOL surgery and pars plana silicone oil removal was donein one step. In all patients, lens power was determined by IOL Master Device. There was no significant difference between the two groups in terms of age (P = 0.36) and gender (P = 0.88). The refractive error in the first and second groups was -0.75± 0.66 and -1.00± 0.99 diopter respectively, but the difference was not statistically significant (P = 0.44). The mean of uncorrected visual acuity six months after one-step and two-steps surgery was 1.20± 0.08 and 1.13± 0.17 Log MAR respectively, but the difference was not statistically significant (P = 0.18). Also, best corrected visual acuity six months after one-step and two-steps surgery was 0.98± 0.26 and 0.91± 0.28 Log MAR, respectively, which was not statistically significant (P = 0.27). In respect to no statistically significant difference between two groups and lower risk of complications of the one-step approach, including complications of anesthesia, as well as lower cost and fewer visits, we recommend surgeries should be performed in one step.

Medical Science, 2021, 25(109), 602-608

Prevalence and predictors of type II diabetes mellitus in heart failure patients with reduced left ventricular ejection fraction, Madinah, Saudi Arabia

Raneem Alraheili, Yousef Al-Alawi, Bayan Alalawi, Amjad Karam, Mohammad Manqu, Alaa Alraheili

Background: Heart Failure (HF) occurs more commonly in patients with type II Diabetes Mellitus (DM). Conversely, recent publications suggesting that the reverse is also true. Many mechanisms have been suggested, including sympathetic nervous system overactivity. Also, neurohormonal activation leads to an increase in the levels of catecholamines and cortisol which inhibit

pancreatic insulin secretion and stimulate hepatic gluconeogenesis and glycogenolysis. *Methods*: This is a cross-sectional study conducted at Madinah cardiac center involving HF patients with reduced left ventricular ejection fraction (HFrEF) during the period from 1-March-2011 to 20-June-2019. Patients were divided into two groups based on the presence or absence of type II DM. *Results:* Out of 1607 patients included in the analysis, 1078 (67.1%) were males, 127 (7.9%) had myocardial infarction (MI), 356 (22.2%) valvular heart disease, 597 (37.1%) Coronary Artery Diseases (CADs), 146 (9.1%) underwent percutaneous coronary interventions and 95 (5.9%) underwent coronary artery bypass grafting. 825 (51.3%) were hypertensive, 835 (52.0%) were anemic, 289 (18.0%) were smokers, and 629 (39.1%) had stage 3 chronic kidney diseases. About 56.1% of HF patients were diabetic. Multivariate analysis showed that older age [OR, 1.02; 95% CI, 1.01-1.03; p<0.001], presence of Hypertension (HTN) [OR, 4.06; 95% CI, 3.20-5.16; p<0.001], anemia [OR, 1.68; 95% CI, 1.33-2.13; p<0.001] or CADs [OR, 1.78-2.28; 95% CI, 1.01-1.03; p<0.001] were the independent predictors of type II DM. *Conclusions:* About 56.1% of HFrEF patients were diabetic. Older age, presence of HTN, anemia, or CADs were the independent predictors of type II DM.

Medical Science, 2021, 25(109), 609-617

A cross-sectional online survey of relationship between the psychological impacts of Coronavirus Disease 2019 (COVID–19) lockdown and the resilience among physiotherapy professionals in India

Rakesh Kumar Sinha, Saumi Sinha, Ashish Bele, Ajinkya Sureshrao Ghogare

Introduction: Novel coronavirus disease 2019 (COVID-19) has caused a rapidly evolving confused state. Like other front line health care workers (HCWs), physiotherapists are also providing their valuable services to COVID-19 patients. Caring COVID-19 patients is exhaustive both physically and mentally due to associated risks. So physiotherapists are prone to development of psychological problems like depression and anxiety during COVID-19 pandemic and lockdown. Main objective of study was to assess relationship between psychological impact of COVID-19 lockdown in the form of depression and anxiety, and the resilience among physiotherapists across India. *Methods*: Present cross-sectional online survey was conducted in the rural tertiary health-care center from Maharashtra, India, with sample size was 378. Data were recorded with consecutive sampling method from study participants on socio-demographic details, Beck's Depression Inventory (BDI), Generalized Anxiety Disorder 7 item (GAD – 7) scale and Brief Resilience Scale (BRS). After the collection, data were analyzed using version 15.0 of SPSS software, Chi-square test, Fisher's exact test and Pearson's correlation test. *Results*: Prevalence of depression and anxiety among study participants were 31% and 37.8% respectively. As regards depression, 56 (14.8%) had mild, 23 (6.1%) had borderline, 29 (7.7%) had moderate, 8 (2.1%) had severe and 1 (0.3%) had extreme depression. As regards anxiety, 96 (25.4%) had mild, 32 (8.5%) had moderate and 15 (3.9%) had severe anxiety. As regards resilience level, 86 (22.8%) had low, 281 (74.3%) had normal and 11 (2.9%) had high resilience. Those respondents who had high resilience had lower rates of depression on BDI and lower rates of anxiety on GAD–7. *Conclusion*: Programs to strengthen resilience should be priority. In longer run, increasing resilience of physiotherapists can have mental health promoting value during the stressful event of COVID-19 lockdown.

Medical Science, 2021, 25(109), 618-631

Sentinel lymph node biopsy following neoadjuvant chemotherapy for breast cancer patients with axillary node metastasis: A cross-sectional survey

Nuha Alsaleh, Amal Alhefdhi, Abdullah I Aljunaydil

Background: A survey of breast surgeons in Saudi Arabia was conducted to evaluate changes in clinical practice regarding sentinel node biopsy (SNB) among clinically node-negative patients after neoadjuvant chemotherapy for breast cancer with axillary node metastasis. *Methods and Materials*: The study was conducted in a tertiary university hospital in Riyadh between August and October 2020 and utilized a 22-question, online survey to examine various factors leading to the omission of axillary lymph node dissection (ALND) among KSA breast surgeons. The questions pertained to basic demographics and the participant's cited influencing factors. Cross-tabulation and the chi-square square test were used to analysis subgroups, and binary logistics regression was used to assess doctor-related factors contributing to a decision to omit ALND after NAC. *Results:* A total of 24 participants completed the survey. The proportion of surgeons preferring SLNB adjunctively or replaced by axillary radiotherapy in patients with clinically positive axilla and receiving NAC was 70.8%. *Conclusion*: The implementation of SLNB post-neoadjuvant chemotherapy has led to a wide variation in clinical practice. Further prospective randomized clinical trials should be conducted in order to evaluate the clinical outcomes of SNB versus more conventional therapies.

Medical Science, 2021, 25(109), 632-639

Retroperitoneal liposarcoma, outcome of a tertiary referral center from Egypt

Ahmed El-Sayed Fathalla, Hala Aziz Shokralla, Tamer Mostafa Manie

Background: Retroperitoneal liposarcoma is the commonest adult's soft tissue sarcoma. It is a slowly growing tumor commonly presents >10cm & at advanced stage. CT is the preferred diagnostic tool. Biopsy is still controversial. Surgery with clear margins is the gold standard for management. Certain situations permit aggressive surgery without R0 resection resulting in inevitable recurrences requiring repeated resection again with improved DFS & OS. CTH protocols are given individually to high grade, failed R0 resections, recurrent & metastatic cases. Well differentiated type carries low metastatic potential but high local recurrence rate with about 90% 5-years OS. Undifferentiated type beside its high local recurrence rate carries high metastatic potential (lungs)

still low than expected (10–15%). Large tumor volume & wide anatomical extents causes' poor outcome & morbidities with RT. Eventually repeated local recurrences become impossible for surgery with resultant mortality from its local destructive effects. *Aims*: To study clinicopathological features of all cases of RPLS, presentation, types, prognostic factors, management (surgery, RT & CTH) & outcome (DFS & OS). *Materials & Methods*: A single institution combined prospective & retrospective analysis of all cases presented to NCI-Cairo University with primary non-metastatic RPLS over period of 8 years from Jan 2012 to Dec 2019. Retrospective study is from Jan 2012 until Dec 2016 & prospective from Jan 2017 until Dec 2019. 52 cases were included. Data collected then analyzed. *Results*: Mean age was (50.6 years) with males/females ratio 1.2. Tumor sizes ranged (13-43cm) mean & median sizes 11.2 & 9cm respectively. Most tumors sized <20cm (30 cases, 57.6%). Median tumor burden (39cm) ranging (21-89cm). Commonest presentation was distension (31 cases, 57.6%) with mass palpated intra abdominally (41 cases, 78.8%). Preoperative image guided biopsy used only in (29 cases, 55.7%). PET-CT used (21 cases, 40.3%) mainly on follow-up. Median hospital stay was (11 days) ranging (8-31 days). Well differentiated type predominated (31 cases, 59.6%). High grade (III) found in (17 cases, 32.6%). Clear margins obtained in (31 cases, 59.6%) with nearby organs resection in (35 cases 67.3%). Commonest postoperative morbidity was SSI (29 cases, 55.7%). Postoperative mortality was in (6 cases, 11.5%). Postoperative CTH (38 cases, 73%) given to all high-grade, non R0 resection & as palliation in recurrent & metastatic cases (35 cases, 67.3%). Post-operative RT given (15 cases, 28.9%) mainly for non R0 resections unfit for CTH. Median follow up time was (63 months) ranging (0.06-9.31 years). OS at 1, 3 & 5 years were 96.2%, 72.4% & 43.9% respectively while corresponding DFS were 68.7%, 30.8% & 17% respectively.

Medical Science, 2021, 25(109), 640-650

Prevalence and impact of primary headache on job performance and quality of life among physician at King Salman Armed Forces Hospital (KSAFH) in Tabuk

Saeed Moshref Alshehri, Abdulrahman Eid Albalawi, Manea Nasser Al-Hablany

Background: Headache is a common health problem among physicians; it could leads to adversative influences on their work performance and quality of life. *Objective*: The study aimed to investigate the prevalence and influence of primary headache on job performance and quality of life of physicians at King Salman Armed Forces Hospital (KSAFH) in Tabuk. *Methods*: A descriptive cross-sectional study was conducted from December 1st2020 to February 28th2021. Well-designed standardized questionnaire was used for data collection. Collected data was analyzed using SPSS software program, Ver. 24. *Results*: about 163 physicians from different departments were included, of whom 68% were males, while 32% were females, only 4% of participants from Emergency, 39% from OPD and 56% from wards, most of participants were specialized either in Surgery (15%), Medicine (23%), pediatric (12%) or OBs. (8%), while 43% of participants from other specialties. This study indicated that the prevalence of primary headache was 86% in the last three months, the intensity of the headache either mild (46%) or moderate (53%). The present study also found that the headache either pulsating / throbbing (39%) or dull / pressing (61%). *Conclusion*: This study revealed that there was no statistical association between occurrence of headache, working department and specialty, while there was statistical association between occurrence of headache and gender.

Medical Science, 2021, 25(109), 651-661

Prevalence of chronic kidney disease among heart failure patients, single center study, Saudi Arabia

Raneem A Alraheili, Bayan S Alalawi, Khalid A Alsaedi, Naif N Alajmi, Fisal M Haobani, Zainab A Alsinan, Fayez D Althobaiti, Ahmad R Alnadri, Mohammed A Alburi, Ali B Alaithan, Abdullah S Alfayez, Raghad A Alshareef , Alaa A Alraheili

Background: The interaction between heart and kidneys has increased, and parts of the pathophysiological background for the cardiorenal syndrome have been established. This study aimed to determine the prevalence of Chronic Kidney Disease (CKD) among Heart Failure (HF) patients. *Methods:* This is a cross-sectional study included 1559 patients, who were admitted with a diagnosis of HF during the period from 1-March-2011 till 20-June-2019 at Madinah cardiac center. All patients were divided into five renal function categories based on the estimated glomerular filtration rate. *Results*: Of the total of 1559 patients, 67.2% were males, 51.3% were hypertensive, 56.1% were diabetic and 49.1% were anemic. About 9.8% of HF patients had stage I CKD, 29.6% had stage II, 41.9% had stage III, 15% had stage IV, and 3.9% had stage V. Patients with CKD were significantly had valvular heart diseases ($p<0.001$), history of ACS ($p=0.002$), rheumatic heart diseases ($p=0.043$), anemia ($p<0.001$), hypertension ($p<0.001$), diabetes mellitus ($p<0.001$), stroke ($p=0.003$) and smoking ($p<0.001$). *Conclusion*: About 9.8% of HF patients had stage I CKD, 29.6% had stage II, 41.9% had stage III, 15% had stage IV and 3.9% had end stage renal disease.

Medical Science, 2021, 25(109), 662-670

CASE REPORT

Enamel & dentin abnormalities in primary & permanent dentitions and multiple impacted permanent teeth associated with vitamin D deficiency: Report of two rare cases

Ramhari S Sathawane, Vidyarjan A Sukhadeve, Rakhi M Chandak, Ashish B Lanjekar, Dhiran Talatule, Kshitija Bhakte

Tooth eruption and shedding is a continuous process, which replaces the exfoliated primary teeth with permanent teeth. The tooth eruption is defined as the occlusal or axial movement of the tooth from its developmental position within the jaw to its functional position in the occlusal plane, whereas the impacted tooth is known as the tooth which ceases to erupt in the oral cavity. Sometimes

impaired tooth eruption takes place in the form of delayed or complete absence of eruption, giving rise to impacted/embedded permanent teeth and over-retained deciduous teeth. Systemic causes such as syndromes, nutritional deficiencies of Vit D & Vit B12, metabolic and hormonal disorders can also contribute to multiple impacted permanent teeth. Vit D deficiency affects enamel & dentin formation and considered as an etiological factor for delayed eruption & multiple impactions of permanent teeth and over-retained deciduous teeth. Vit D deficiencies at very young age have several consequences on the normal growth and development of oral structures. Appropriate interdisciplinary care is needed to successfully address dental abnormalities in primary and permanent dentitions. The attention of dental surgeons is drawn to consider Vit D deficiency as one of the foremost nutritional deficiency responsible for abnormality of enamel & dentin as well as multiple unerupted/ impacted teeth and over retained primary dentition.

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A huge progressive Breast Primary Phyllodus Tumor: A rare case report

Nuha Alsaleh

Phyllodes tumor is described to a small portion of primary tumors of the breast. We report a case of a 64-year-old woman presenting with a lump in the left breast progressive over 4 years reaching her waist level. Core needle biopsy was opined as spindle cell lesion, and subsequent mastectomy confirmed the diagnosis of benign phyllodes tumor. This case is presented for its huge size. To the best of our knowledge this is the largest size it's been reported in the literature.

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ANALYSIS

Awareness of osteoporosis among general population in Ha'il city, Saudi Arabia

Abdelmuhsin Omer Ahmed Hassan, Khalid Farhan Alshammari, Yousef Fauwaz Bakrshoom, Abdulmalik Fehaid Alhamazani, Abdulmajeed Saud Alsadun

Background: Osteoprosis is a common systemic disaes most prvalent in menopausal women. In absence of many studies from Saudi Arabia that have been published in this topic, we conducted this study to assess the public knowledge and awareness towards osteoporosis. *Methods*: This is a cross-sectional study that was carried out using a self-administered structured online survey tool through the "Google Forms" platform. The inclusion criteria were all individuals who agreed to participate in the study, aged ≥18 years, and residing orworking in Ha'il city. There were no restrictions on gender, eduaction, nationality, occupation, or socioeconomic level of the participants. All data were analyzed using Statistical Package for Social Science (SPSS) version 26.0. *Results:* A total of 701 valid responses were included in the final analysis, with a mean age of 32.64±10.38 years. Most of the participants were females (74.61%) and residing in Ha'il city (86.59%) and the majority of them were Saudi (97.72%). There was an obvious defect in the participants' total awareness, with a mean score of 11.56±3.66; out of 22 possible points. Moreover, there was no significant association between the total awareness score and age, gender, residence, nationality, educational level, employment, or marital status. *Conclusion*: Further approaches to increase the awareness levels among the general population are needed to intervene against the potential complications and enhance the prognosis.

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Hemodynamic monitoring in critically ill patients in paediatric ICU

Tarek Ahmed Abdelgawad, Sondos Mohamed Magdy, Marwa Waheed Abd Elhady Nassef, Beshoy Attaallah Ebrahim

Objectives: Monitoring hemodynamics in septic shock is very challenging issue in all septic patients in pediatric intensive care units and to choose the most appropriate vasoactive drug. Aim of our study was to monitor hemodynamics and compare the effects of dopamine, nor-epinephrine and epinephrine. *Methods*: Sixty patients were divided into three groups according to vasoactive drug used either dopamine, adrenaline or noradrenaline and subjected to measure cardiac functions by echocardiography. *Results*: Adrenaline was the most powerful drug affecting cardiac function and improving cardiac index (CI) on the other side noradrenaline was the most potent affecting blood pressure. *Conclusion*: The use of echocardiography can help to choose and escalating vasoactive drug in septic shock.

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CASE REPORT

Case report of testicular epidermoid cyst

Abdullah Ayed A Alshahrani

Background: The epidermoid cyst of the testes is an exceptional benign tumor. Furthermore, inguinal orchidectomy is the treatment of choice for testicular tumors; conservative therapy can be attempted if an epidermoid cyst is suspected. *Case presentation:* The study presented a case of an 18-year-old patient with a right-sided testicular epidermoid cyst. Ultrasound showed rounded intra-parenchymal lesion measuring 12×12×13 mm with heterogeneous appearance ad hyper-echogenic center with no internal blood

flow and no anomaly detected in the contralateral testicle. *Conclusion*: The testicular epidermal cyst is considered as occasional benign tumor affecting the testis; mostly the right side is the predominant side. Currently, conservative surgery has become a gold standard due to the advent of medical imaging to identify the differential diagnosis of teratoma and testicular epidermoid cyst.

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ANALYSIS

Public perception to the knowledge of venous thromboembolism among Saudi Arabia 2020: A cross-sectional study

Hydi Ahmed, Razan M Alzahrani, Ibrahim A Alshardi, Abdulmalek A Aboulkhair, Amal B Alzahrani

Introduction: DVT deaths are caused by massive pulmonary embolism (PE) due to the migration of the formed thrombus, but awareness of DVT or PE was significantly higher among those with a personal or family history of VTE. Participants had positive perceptions of thromboprophylaxis and were satisfied with the treatment (> 69%). The main study objective was to measure the awareness of VTE by conducting a local quantitative research study to address this knowledge gap among adults in Saudi Arabia 2020. *Methods:* A cross-sectional study was conducted among the adult Saudi population all over the country. The data were gathered using a special, predesigned self-administered electronic questionnaire translated to Arabic. The study included adult Saudis over 18 years old. *Results:* Majority of the study respondents had a bachelor's education (329 of 559). There were only 8 (1.6%) respondents aged above 65, while the majority age group was between 25 years and 39 years at 42.6%. Most people would prefer to get healthcare information from doctors or healthcare professionals (50.3%). Education level, however, was statistically significantly associated with both the knowledge of DVT and PE $p < .01$ in both cases. *Conclusion:* The knowledge of DVT and PE is still low, with about a third of the Saudi general population informed. However, the fact that about 60% of the respondents know about the symptoms of DVT and PE is a sign of a positive attitude towards the knowledge of DVT and PE within the general population.

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Role of computed tomography angiography in detecting pulmonary embolism and the prevalence of it

Hamid Osman Hamid

Background: Pulmonary embolism (PE) is an obstruction of the principal pulmonary artery, or one of its parts, by a material that has passed into the bloodstream from elsewhere in the body. PE is the third leading cause of cardiovascular-related mortality. Computed Tomography angiography (CTA) is the most technique of choice. The purpose of manuscript is to evaluate and summarize the role of imaging tools in diagnosis of PE in suspected patients, with particular focus on CTA. *Methods and materials*: This retrospective study was conducted at Taif hospitals (King AbdulAziz specialist hospital (KAASH) and King Fiasal Medical Complex (KFMC)) for two months. It included data from 1920 patients who were chosen as cases of suspected PE based on the clinical examination and referred for CTA of the chest. Patients' data were reviewed from the PACS program. Data were analyzed using Microsoft Excel version 2010. Ethical approve was obtained from our university and hospitals under investigation. Any patient with missing data or diagnosis report was excluded from study *Results*: Positive patient of PE that detected using CTA was 1130, 40 of them were not confirmed by laboratory test (D-dimer test). The most affected age range was (61-80 y) which represents 440 patient (39%) from total cases. Female patients were more affected by PE than male where they showed 620(55%) compared to 510(45%) patent in both gender. *Conclusion*: Recent data from current research associated with published data well confirmed the role of computed tomography in detecting PE.

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Can immature granulocyte predict the prognosis of bladder cancer?

Osman Barut, Sefa Resim

Objectives: To determine the diagnostic value of immature granulocyte (IG) count before treatment in patients with invasive bladder cancer and to compare this marker with other routine inflammation markers. *Methods:* In this retrospective observational study, the data of patients who underwent transurethral resection for the diagnosis of bladder cancer were analyzed. Two groups were formed as those with non-muscle invasive bladder cancer (NMIBC) and those with muscle invasive bladder cancer (MIBC). Demographic data, routine laboratory tests, neutrophil/lymphocyte ratio (NLR), red blood cell distribution width (RDW), and IG levels of the groups were recorded and compared. *Results*: There were 57 patients in the NMIBC group and 55 patients in the MIBC group. NLR, RDW and PLR levels were significantly higher in the MIBC group ($p<0.001$, each). In univariate analysis neutrophil, lymphocyte, NLR, IG, and RDW were identified as predictors for MIBC. In multivariate analysis, NLR, RDW and IG were significantly associated with the predictors of MIBC ($p<0.001$,each). Cut-off values were 3.06 for NLR, 11.15 for RDW, and 0.08 for IG. *Conclusion*: IG is an important inflammatory marker included in complete blood count parameters and may be useful in predicting muscle invasion in patients with bladder cancer.

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Topical Minocycline as treatment for Acne Vulgaris

Firas Fakhir Altameemi, Oday Sajjad Alsawad

Objective: Evaluate the efficacy and safety of 4% topical minocycline in treating moderate-to-severe acne vulgaris (AV). *Methods:* A prospective single arm clinical study than involved 50 patients with moderate-to-severe acne, the patients were followed up for 12 weeks from baseline and was give once daily minocycline 4% topical treatment. The coprimary end points at week 12 were the absolute change in inflammatory lesion counts from baseline and the rates of Investigator's Global Assessment (IGA)-assessed treatment success, which was defined as an IGA score of 0 or 1 (description of clear or almost clear) plus at least a 2-grade improvement from baseline. Other end points included the absolute change from baseline in noninflammatory lesion count at week 12. *Results*: The study included 50 patients with moderate – severe lesions (4:1 ratio), with the majority female participants, mean age was 21.5 ± 4.7 years. In the present study there was significant reduction in both mean count of inflammatory and non-inflammatory lesions after 12 weeks of follow-up (-27.5 and -30, respectively) with 16% of the patients achieved treatment success according to IGA score. *Conclusions:* The once daily use of topical minocycline 4% for 12 weeks result in improvement in both inflammatory and non-inflammatory lesion, and improvement in investigator global assessment. In term of safety this product offers very few adverse events.

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Drainage of septic knee joint using redivac drain and lavage under local anesthesia

Falah Kadhim Hasan

Objective: investigate the use redivac drainage tubes to drain septic knee arthritis in patients who are unfit for general anesthesia using local anesthesia as an alternative method in treating septic knee arthritis. *Methods*: sixteen patients between 20 to 65 year old age who had septic knee arthritis and were unfit for general anesthesia underwent local drainage using redivac tubes and continuous isotonic fluid irrigation under local anesthesia. *Results*: all of the 16 patients showed improvement very soon after the procedure in clinical and laboratory measurement, with early joint movement and rehabilitation. *Conclusions*: Treating septic knee arthritis surgically as an emergency in patients who are unfit for general anesthesia by using redivac drain and lavage under local anesthesia provide an excellent alternative way that may save patients' lives and decrease their morbidity.

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Statins induced transaminitis in Iraqi patients with dyslipidemia

Thuraya Salim Abed, Gheyath Al Gawwam, Hayder A Fawzi

Objective: assess the effect of using statins on liver enzymes in patients with dyslipidemia. *Methods*: A prospective observational study, the study involved 140 participants that were initiated on statin therapy at the end of the study 104 patients completed the study. Age of the patients ranged from 35 – 74 years. All patients examined after 6 months to assess the elevation in aminotransferase and bilirubin levels. *Results*: After 3 and 6 months; there was a significant elevation of serum AST, ALT, and bilirubin. However only 2.9% and 3.8% of the patients had an elevation (more than 2 upper normal limit) in serum AST and ALT respectively. The most common side effect was muscle ache. *Conclusions*: statins is appear to safe drug, despite there an elevation in some of liver enzymes in this study this elevation is mostly biochemical in natural. In term other side effect statins showed good tolerability with muscle ache being the most common side effect.

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REPORT

Antifungal efficacy of clove flower buds (*Syzygium aromaticum*) oil and aqueous extract against dermatophytes clinical isolates

Mohammed H F Shalayel, Saada Nour, Ghassab M Al-Mazaideh, Sabry Younis Mahmoud, Eman Saleh Farrag

This study aimed to define the efficacy of clove's oil and its aqueous extract against dermatophytes clinical isolates in comparison to some antifungal drugs namely, fluconazole, ketoconazole, itraconazole, terbinafine and griseofulvin, by using the in vitro susceptibility test. Terbinafine was found to have the highest potency against all isolates, with an MIC median range of 0.002-0.5 μg/mL. Itraconazole, ketoconazole and griseofulvin revealed comparable good antifungal potency in terms of MIC, 0.05 - 0.5 μg/mL, 0.25 - 0.5 μg/mL, and 0.5 – 1 μg/mL respectively. Meanwhile, fluconazole displayed the least antifungal efficacy (2 - 8 μg/mL). MIC results for *Syzygium aromaticum* oil and clove aqueous extract were 1.25-2 μg/mL and 125 μg/mL respectively. It was concluded that *Syzygium aromaticum* oil exhibited a significant antifungal efficacy while, the aqueous extract did not reveal such antifungal potential. This may be due to the hydrophobicity of most of the active ingredients.

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