



Joint Event on
15th Global Experts Meeting on
PATHOLOGY AND LABORATORY MEDICINE
&
WORLD CANCER SUMMIT 2018
July 02-03, 2018 Bangkok, Thailand

Posters

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Study of risk factors for chronic diseases among specially challenged peopleFariha Kauser¹, Anshoo Agarwal² and Madiha Younas³¹University of Dundee, UK²Northern Border University, Saudi Arabia³Riphah International University, Pakistan

Introduction: Our community has been very supportive in making the life of specially challenged people better, but today we are facing another health complication among them, which is obesity. Obesity has become one of the major risk factors for chronic diseases later in life. It is a reversible predisposing factor for several debilitating diseases including atherosclerosis, hypertension and diabetes mellitus. So our main goal is to raise awareness among the special care centers and to educate the parents and teachers about the risks of obesity and associated disorders and measures to be taken to improve their lifestyle and prevent the complications which may occur in the future in such individuals.

Aims: Determination of risk factors by assessing the prevalence of obesity, overweight, central obesity, their associated factors and other diseases in specially challenged children and to educate the parents and care takers about the risk of among them.

Materials & Methods: The study was done in the Special Care Centre in UAE, Abu Dhabi, Ras al-Khaimah and Islamabad and is based on a pre-structured questionnaire comprising the lifestyle data, in particular, age, sex, ethnicity, medical condition, diet, socio economic status, education level, family history of obesity and frequency of physical activity in specially challenged people. Variables including height, weight, height/weight ratio, waist circumference, calculation of BMI were also determined as a requirement to study obesity among them. Diagnosis of obesity and central obesity was confirmed by the WHO standard recommended method by determining of Body Mass Index (BMI) and Waist Circumference (WC).

Results & Discussion: We established the percentage of specially challenged people who are obese, overweight, have central obesity and are at risk. The study provided information about the changes in lifestyle which are required to avoid the complications and reducing the prevalence of obesity among the specially challenged people. It also helped in educating the parents and care takers of these people regarding risk of cardiovascular disorders and the diseases associated with obesity.

Conclusion: The prevalence of obesity was high indicating that these individuals are prone to chronic diseases in the future, if not intervened at early stages. There is a need to educate the parents and care takers of these people. More health programs should be introduced among these centers to fight the prevalence of obesity and make the health care providers aware of the danger of obesity among them.

Biography

Fariha Kauser has received her Bachelor's degree in Dental Surgery from Ras al-Khaimah Medical and Health Sciences University, UAE and Diploma in Medical Education, University of Dundee, Scotland.

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Notes:



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Accepted Abstracts

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Granular cell tumor clinical spectrum of the benign and malignant entityFariha Kauser¹, Anshoo Agarwal² and Arvind Sinha²¹Civil Hospital Karachi, Pakistan²B.P. Koirala Institute of Health Sciences, Nepal

Granular cell tumors are uncommon lesions, although the head and neck region accounts for approximately 50% of all lesions. The basic cell of origin is now thought to be neural, although past studies indicated an origin from striated muscle or an origin from histiocytes, fibroblasts or pericytes. The tumor generally occurs in middle or older aged adults. Lesions often demonstrate pallor or a yellowish discoloration and typically have a smooth surface. As most of the granular cell tumors are benign, surgical excision of the lesion is the treatment of choice. We report four cases of granular cell tumors: Case-1: Mimicking as metastatic skin nodule in umbilical region diagnosed at B.P. Koirala Institute of Health Sciences, Case-2: Occurring in a 3 year old child, Case-3: Granular cell tumor co-existing with squamous cell carcinoma in respiratory tract and Case-4: Granular cell myoblastoma occurring in a burn case, studied at Civil Hospital Karachi. The histopathologic findings in all these cases showed features of granular cell tumors confirming the diagnosis. Cases are reported for its rarity and uncommon presentation.

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Level of human Kidney Injury Molecule-1 (KIM-1) as an early marker for diabetic nephropathy in Egyptian type-2 diabetic patients**Hoda Ali Mohamed El-Attar, Khalil G I and Gaber E W**
Alexandria University, Egypt

Background: Human Kidney Injury Molecule-1 (KIM-1) is produced in the affected segments of the proximal renal tubule whenever there is a pathophysiological state resulting in dedifferentiation of the epithelium. The kidney injury molecule-1 is a type-1 transmembrane glycoprotein (339 aa). KIM-1 ectodomain is cleaved and shed in a metalloproteinase-dependent fashion. The soluble KIM-1 protein that appears in the urine of humans is about 90 KDa. All forms of chronic kidney disease, including diabetes are associated with tubulo-interstitial injury.

Aim: The current study was performed try to assess use of urinary KIM-1/Creatinine ratio as a sensitive diagnostic tool for renal injury in the urine of patients with type-2 diabetic Egyptian patients.

Methods: Eighty (80) subjects were subjected to clinical examination included and subdivided as 20 apparently healthy control volunteers (group-1) and 60 diabetic patients which were divided into 3 subgroups (Group-2, Group-3 and Group-4) of 20 patients each: According to ACR: (ACR<30 mg/g, 30-299 mg/g and ≥300 mg/g respectively). All were subjected to laboratory investigations which included: Morning mid-stream urine sample for: (1) Complete urine analysis, (2) quantitative measurement of urinary albumin, (3) urinary creatinine, (4) calculation of urinary albumin to creatinine ratio, (5) measurement of KIM-1 (ELISA), and (6) calculation of KIM-1 to creatinine ratio.

Results: Urinary KIM-1 levels were increased with the progression of nephropathy. Urinary KIM-1 levels were independent risk factor of eGFR and albuminuria in diabetic patients. Urinary KIM-1/Cr ratio was more sensitive than KIM-1. There was no correlation between urinary KIM-1/Cr ratio and GFR in all studied groups.

Conclusion: Urinary KIM-1/Cr ratio is a sensitive, noninvasive diagnostic tool for kidney affection in type-2 diabetic Egyptian patients that seem to predict renal injury in early period independent of albuminuria. Due to lack of correlation, both KIM-1/Cr and Alb/Cr ratios are required to be calculated for type-2 diabetic patients.

Recommendations: The use of KIM-1/Cr ratio as a diagnostic tool for kidney affection by measuring it in urine of type-2 diabetic patients at risk of chronic kidney disease.

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Renalase and Dopamine study in chronic renal failure patients**Hoda Ali Mohamed El-Attar and Gaber E W**
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Introduction: The human kidney releases a monoamine oxidase, renalase, which was discovered in 2005, to the blood stream to regulate the blood pressure. Renalase decreases systemic pressure by metabolizing the circulating catecholamines. Hypertension is highly prevalent in patients with diabetic nephropathy which is one of the leading causes (about 80%) of chronic kidney disease and end-stage kidney disease. When considered in isolation, hypertension and diabetes are associated with increased risk of the development of cardiovascular and renal complications. It is recognized that sympathetic nervous activation and stimulation of the rennin-angiotensin-aldosterone are involved. The dopaminergic and rennin-angiotensin systems interact to regulate the blood pressure. The vasodilator, Dopamine, counteracts angiotensin receptors in the paracrine regulation of renal sodium transport. Levels of renalase that metabolize catecholamines are decreased in chronic kidney disease and the plasma concentration of renalase is markedly reduced in patients with ESRD. Chronic kidney disease is often characterized by the presence of sympathetic hyperactivity, which contribute to the development of other forms of organ damage independent of its effect on blood pressure. It is associated with heart failure, arrhythmias and atherogenesis. Decrease renalase level plays an important role in cardiovascular pathology. Chronic kidney disease leads to an 18-fold increase in cardiovascular complications not fully explained by traditional risk factors. Preventing the progression of renal failure and reducing cardiovascular risk of uraemic patients are major challenges for nephrologists. Interference with sympathetic over activity may provide a new therapeutic avenue to follow in clinical medicine.

Aim: To assess the relationship between Dopamine and Renalase in Egyptian type-2 diabetic patients in the presence and absence of diabetic nephropathy.

Subjects & Methods: 80 subjects were divided in three groups as follow: Group-1: 10 control healthy volunteers, Group-2: 60 type-2 diabetic patients and Group-3: Type-2 diabetic patients on maintenance hemodialysis.

Results: Significant increase in blood pressure, both systolic and diastolic in diabetic patients and diabetic patients on maintenance hemodialysis as compared to controls. No significant change in Dopamine level in between the studied groups. No significant change in Renalase in type-2 diabetic patients but significant increase in renalase level in diabetic patients on maintenance hemodialysis as compared to controls ($p=0.000$) also to diabetic patients ($p=0.004$). There was significant correlation between Renalase and Dopamine ($r=0.261$, $p=0.022$) and Renalase and diastolic blood pressure ($r=0.243$, $p=0.041$) in diabetic patients.

Conclusion: Renalase is an attractive replacement therapeutic modality in hypertensive type-2 diabetic patients in order to prolong the interval between early chronic and end-stage renal failure.

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Perception and awareness of oropharyngeal cancer among patients attending hospitals in Pakistan**Fariha Kauser, Anshoo Agarwal, Asma Parvez and Madiha Younas**
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Background: Oropharyngeal cancer is a major public health problem worldwide. Oral and pharyngeal cancers grouped together are the sixth most common cancers in the world. Smoking, alcohol use, smokeless tobacco products and HPV infections are the major risk factors. Earlier diagnosis greatly increases patient's chances of survival as the mouth is very accessible for a clinical or self-examination.

Aim: To assess the levels of awareness of oropharyngeal cancer and its risk factors amongst different age groups, educational levels and ethnicities in different cities across the Pakistan.

Material & Methods: We conducted a cross-sectional questionnaire survey which included people of different age groups, educational backgrounds, occupations across six different cities in the Pakistan. The data was analyzed using Microsoft excel.

Results: Out of the total 512 participants, 85.16% were aware that cancers can occur in oropharyngeal area cancer. Regular visits to dentist were cited by 57.81% of participants as best method of prevention. Amongst the risk factors, awareness of cigarettes as the major cause was cited by most of the participants (39%). Internet was cited by most respondents as the medium of awareness (56.54%) followed by television (53.5%). Most of participants cited swelling in mouth as the first manifestation of oral cancer.

Conclusion: There is generally a high level of awareness in our population group. But awareness needs to be increased about prevention methods and treatment options.

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Clinico-pathological profile of jaw and sinonasal masses: An experience in tertiary care hospitalFariha Kauser¹, Anshoo Agarwal² and Arvind Sinha²¹Civil Hospital Karachi, Pakistan²B.P. Koirala Institute of Health Sciences, Nepal

Background: To study the incidence, mode of presentation and histopathological features of jaw and sinonasal lesions in the surgical pathology material.

Methods: Jaw and sinonasal tumors biopsied or surgically excised over a period of five years diagnosed at B.P. Koirala Institute of Health Sciences and Civil Hospital Karachi. The histopathological records of these cases were analyzed to see the prevalence, common site, age of presentation and correlation between clinical and histopathological diagnosis.

Results: In five years there were 135 jaw and sinonasal tumor cases diagnosed representing 0.18% of all the surgical specimens received. Epithelial tumors outnumbered the non-epithelial tumors. Malignant tumors were seen predominantly in males. Benign lesions included squamous papilloma and inverted papillomas and angiofibroma. Squamous cell carcinoma was the commonest among malignant tumors. The second most malignant tumor was adenoid cystic carcinoma. Other rare types of malignant tumors included the variants of squamous cell carcinoma, malignant melanoma of the nose, glioma and neurofibroma and neurofibromatosis. The commonest site was nasal cavity, followed by paranasal sinuses and external nose, infra-orbital and jaw region. The age ranged from 12 to 70 years with predominance in males.

Conclusion: Commonest site of benign tumors is nasal cavity. Tumors of external nose are rare. All jaw and sinonasal masses should be subjected to histopathological examination for proper diagnosis due to uncommon presentations.

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Neuronal tumors diagnosed at Department of Pathology, Sir Salimullah Medical College, Dhaka, Bangladesh during two years study period

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During the past century, cancer has emerged as the most challenging problems for public health systems in medium and low income countries. With a cancer load of more than one million, Bangladesh is not an exception. The present study shows that out of 17 brain tumors meningioma is the most common followed by anaplastic astrocytoma, fibrillary astrocytoma, pilocytic astrocytoma, glioblastoma, gemistocytic astrocytoma and astroblastoma. Out of 73 peripheral neuronal tumors ganglioneuroma is found in highest number followed by schwannoma and lastly neurofibroma. Benign tumor is found in 88.89% and malignant tumor is found in 11.11% of the studied neuronal tumor. Benign neuronal tumor was found more in female than male in both age group and was found highest in adult age group. Malignant neuronal tumor was found highest in adult age group and was more in adult male and pediatric female. Overall benign tumor was found more in female than male and malignant tumor was found equally in either sex group irrespective of age.

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The total count of RBC and peripheral blood film in hemolytic anemic patients with and without G-6PD enzyme deficiency**Razzak M¹, Begum N² and Hossain M D³**¹Dhaka National Medical College, Bangladesh²Bangabandhu Sheikh Mujib Medical University, Bangladesh³Sir Salimullah Medical College, Bangladesh

Background: Erythrocyte G-6PD enzyme deficiency is an important cause of hemolytic anemia with consequent decrease bilirubin and increase various types of abnormal cell- microcytic hypochromic cells, target cells, nucleated red cells, tear drop cells, macrocytic cells, schizocytes, Heinz body, erythrocyte fragmentation, spherocytes and polychromasia.

Objective: To assess the RBC count and peripheral blood film in erythrocyte G-6PD enzyme deficient with hemolytic anemia in order to find their status.

Method: The cross sectional study was carried out in the Department of Physiology, BSMMU, Dhaka from July 2008 to 2009 to observe the RBC count and peripheral blood film in patient with hemolytic anemia. For this, total number of 50 hemolytic anemic patients (Groups-B) with age ranged from 5 to 30 years of both sexes was studied. Among them, 25 were without G-6PD deficient hemolytic anemia (group-B1) and 25 were hemolytic anemia with G-6PD deficiency (group-B2). Age and sex matched 30 apparently healthy subjects with normal blood G-6PD were included to observe baseline data (Group-A) and also for comparison. The subject was selected from out-patient Department of Hematology, Bangabandhu Sheikh Mujib Medical University, Dhaka. Blood erythrocyte G-6PD enzyme level and total RBC count were measured by standard laboratory techniques. Analysis of data was done by unpaired student's t-test.

Result: The total RBC count was significantly lower Group B2 vs. Group A and also Group B1 which were statically significant. Various types of abnormal cell were found Group B1 and also Group B2.

Conclusion: From this study, it may be concluded that, increased hemolysis of RBC with low RBC count and various types of abnormal cell were found in G-6PD deficient hemolytic anemic patients which might be membrane defect.

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Case report on neurofibromatosis type-1: A diagnostic challenge

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Neurofibromatosis type 1 (NF1), also known as von Recklinghausen's disease, is a human genetic disorder. It is probably the most commonly inherited disorder caused by a single gene. This is a report of five cases of Neurofibromatosis type 1. A 57 year old man affected by NF1 who has severe atrophy of the jaws and extremely unsatisfactory anatomical conditions for conventional dental restoration. Radiographic and clinical evaluations showed inadequate quantity of bone for immediate implant rehabilitation. Delayed implant protocol was performed to obtain the correct bone volume and implants were inserted in the anterior parts of both jaws to support a prosthetic restoration.

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Comparative hematology of apparently healthy free-living wild birds from the orders Apodiformes and Passeriformes in Zaria Kaduna State, Nigeria**Samson James Enam**
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The research established baseline hematological parameters of five species comprising 20 each of *Ploceus luteolus* (Little Weaver), *Apus caffer* (White-Rumped Swift), *Quelea quelea* (Red-Billed Quelea), *Euodice cantans* (African Silver-Billed) and *Euplectes frascisca* (Northern Red Bishop) of apparently healthy free-living wild birds in Zaria, Nigeria. *Apus caffer* obtained highest mean hematocrit ($46.25 \pm 1.43\%$), hemoglobin concentration (15.87 ± 0.58 g/dl) and *E. cantans* had highest mean erythrocyte count ($5.24 \pm 0.32 \times 10^{12}/l$), while *P. luteolus* recorded lowest mean hematocrit ($34.45 \pm 1.73\%$), hemoglobin concentration (12.15 ± 0.59 g/dl) and erythrocyte count ($3.71 \pm 0.15 \times 10^{12}/l$), respectively. *Apus caffer* again had highest mean corpuscular volume while the mean corpuscular hemoglobin concentration was highest for *P. luteolus* (35.41 ± 0.51 g/l). The mean leukocyte count was highest for *A. caffer*, $2.62 \pm 0.31 \times 10^9/l$, and lowest for *E. cantans*, $0.63 \pm 0.08 \times 10^9/l$. *Apus caffer* also had highest mean values for heterophils ($2.62 \pm 0.31 \times 10^9/l$) and lymphocytes ($2.01 \pm 0.23 \times 10^9/l$). *Euodice cantans* obtained lowest mean counts for heterophils ($0.04 \pm 0.02 \times 10^9/l$) and lymphocytes ($0.54 \pm 0.08 \times 10^9/l$). Heterophil/lymphocyte ratio, an important indicator for prolonged stress was highest for *E. cantans* (1.95 ± 1.90) and lowest for *E. frascisca* (0.12 ± 0.02). In conclusion, there were significant interspecies differences ($p < 0.05$) for these hematological parameters and this could, among other factors be associated with differences in disease response and increased energy demand as exemplified by *A. caffer* (Apodiformes) which had highest mean values for almost all the parameters; owing to the fact that *A. caffer* flies higher and more rapidly and spends much time in the air than the Passeriformes studied, hence the physiological increased need for adequate gaseous exchange.

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Tumor infiltrating cytotoxic CD8 T-cells predict clinical outcome of neuroblastoma in children**Mahtab Rahbar**

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Neuroblastoma is often infiltrated by inflammatory cells. One possible role of these inflammatory cells is that they represent a cell-mediated immune response against cancer. CD8+ lymphocytes are a known crucial component of cell-mediated immunity. This study was to explore the prognostic value of tumor-infiltrating CD8+ cytotoxic lymphocytes in Neuroblastoma. Tumor-infiltrating CD8+ lymphocytes were assessed by immune-histochemical staining of tumor tissue from 36 neuroblastoma from April 2008 to May 2015. The number of CD8+ T-cells was counted in tumor nest (intra-tumoral) and in the fibrovascular stroma of tumor (peritumoral) and their relationship with clinicopathologic outcome was determined. The total number of CD8+ cells was inversely correlated with tumor histology grade ($P<0.001$), vascular invasion ($P<0.001$), capsular invasion ($P<0.002$), calcification ($P<0.005$), necrosis of tumor ($P<0.001$), regional lymph nodes invasion ($P<0.003$), distant metastasis ($P<0.003$), stage ($P<0.003$) and was positive correlated with N-myc oncogene presentation ($P<0.002$) in neuroblastoma. However, there were no correlation between patient's age, sex and size of tumor with infiltration of CD8+ cells ($P<0.097$, $P<0.142$ and $P<0.722$, respectively). In this analysis, total CD8 T-cell count was a dependent prognostic factor in children. Total number and stromal CD8 lymphocytes were associated with better patient survival ($P<0.003$ and $P<0.05$, respectively) in children. CD8 T lymphocytes have antitumor activity and influence the behavior of neuroblastoma and might be potentially being exploited in the treatment of neuroblastoma.

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Clinical characteristics, demography and outcome trends of adjuvant anthracycline- and taxane based chemotherapy regimen in early-stage breast cancer- A single centre experience of 264 patients

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Background: Anthracycline- and Taxane based chemotherapy regimen remains the gold standard for the adjuvant chemotherapy treatment of early-stage breast cancer. However, the knowledge on the use and effectiveness of this treatment regimen in real-world setting is limited. This study examined the treatment trends of adjuvant anthracycline- and taxane based chemotherapy regimen in the routine clinical practice at a single tertiary care cancer centre in India.

Methods: Patients with histologically or cytologically confirmed early breast cancer who underwent primary breast surgery followed by adjuvant treatment with anthracycline- and taxane based chemotherapy regimen at Medanta Cancer Institute between 2010 and 2015 were included in the study. Data on clinical characteristics and treatment details was collected from the patient's medical records. Invasive Disease Free Survival (IDFS) was taken as the primary efficacy endpoint.

Results: Two sixty four patients were included in the analysis. There were 262 women and 2 men with a median age of 50 years (range 24-76 years). Among the 262 women, 107 (40.5%) were premenopausal and 157 (59.5%) had reached menopause. The laterality of breast was left in 144 (54.5%), right in 116 (43.9%) and bilateral in 4 (1.6%) patients respectively. 93 (35.2%) patients underwent breast-conserving surgery (BCS) and 171 (64.7%) modified radical mastectomy (MRM). Grade of tumor was 1, 2 and 3 in 19, 140 and 105 patients respectively. Tumor Focality was single in 215 (81.4%) patients and multiple in 49 (18.6%) patients respectively. The median number of nodes dissected were 17 (range 1-74) with > 4 positive nodes in 60 (22.7%) patients. Estrogen, progesterone and HER-2 receptors were positive in 154 (58.3%), 143 (54.2%) and 8 (3%) patients respectively whereas 102 (38.6%) patient had triple negative disease. Although the overall HER-2 receptor positivity in our breast cancer data is 25.2% (181 out of 717 patients), the above data of 3% represent the subset of patients that were treated with anthracycline-and taxane based chemotherapy regimen. At a median follow-up of 37 months (range 1-99 months), the IDFS was 83.6%.

Conclusion: The preliminary results of this study confirm the clinical utility of anthracyclines- and taxanes based chemotherapy regimen in the adjuvant chemotherapy treatment of early-stage breast cancer. Further follow-up will be undertaken to assess the long term utility of this treatment regimen.

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Lung cancer screenings – winning battles in the lung cancer war

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Methods: The Medicare eligibility guidelines for screening were followed: Patients aged 55-77 who currently smoke or have quit within the last 15 years with a tobacco smoking history equal to at least 30 pack years. HCA Midwest facilities are ACR (American College of Radiology) accredited and use approved low dose screening techniques. All sites are participating in the ACR National Radiology Data Registry for lung screening “which will help benchmark outcomes and process of care measures and develop quality improvement programs” (www.acr.org). For the period of January 2016 – June 2017, data was obtained by each HCA Midwest facility participating in LDCT Lung Screenings. All screenings were read using the lung reporting and data system (LungRADS) classification method. Utilizing Lungview software, reports were obtained by month and included the LungRADS classification.

Results: HCA Midwest facilities had 221 lung screenings January – December 2016 with 16 lungRAD 4 designations and 4 positive lung cancer diagnoses, a 1.8% diagnosis rate. From January-June of 2017, the same facilities had 126 screenings with 11 lungRAD 4 designations and 4 diagnosed lung cancers, a 3% diagnosis rate.

Conclusion: Lung cancer screening programs are a valuable tool in preventive medicine. The data shows that we are seeing benefit and expect as the number of screenings increase, so will the number of early stage cancers diagnosed.

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Delving KS-01 as a novel therapeutic strategy in treating breast cancer.

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Cancer cells have an increased need for cholesterol, which is required for cell membrane integrity. Cholesterol accumulation has been described in various malignancies including breast cancer. Cholesterol has also been known to be the precursor of estrogen and vitamin D, both of which play a key role in the histology of breast cancer. Thus, depleting the cholesterol levels in cancer cells is a proposed innovative strategy to treat cancer. Therefore, novel cholesterol-depleting compounds are currently being investigated. KS-01 is a cyclic amylose oligomer composed of glucose units. It solubilizes the cholesterol and is proven to be toxicologically benign in humans. This led us to hypothesize that it might deplete cholesterol from cancer cells and may prove to be a clinically useful compound. Our work provides preliminary experimental evidences to support this hypothesis. We identified the potency of KS-01 *in vitro* against two breast cancer cell lines: MCF-7 (Estrogen positive, ER+), MDA-MB-231 (Estrogen negative, ER-) and compared the results against two normal cell lines: MRC-5 (Normal Human Lung Fibroblasts) and HEK-293 (Normal human embryonic kidney cells) using cytotoxic, apoptosis and cholesterol based assays. KS-01 treatment reduced intracellular cholesterol resulting in significant breast cancer cell growth inhibition through apoptosis. The results hold true for both ER+ and ER-. These data suggest that KS-01 can prevent cholesterol accumulation in breast cancer cells and is a promising new anticancer agent.

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Clinical Features and Outcomes of Carcinoma of Unknown Primary Site: A single center experience

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Background: Carcinoma of unknown primary (CUP) is a heterogeneous entity of malignant epithelial tumors. In general, CUP follows an aggressive biological and clinical behavior. There is generally limited information regarding this issue. Objectives: To assess clinical and epidemiological features of patients diagnosed with CUP. Patients and method: All patients categorized as having CUP who attended the department of clinical oncology, Menoufia University from January 2013 to December 2015 were included in the study. The patients' features, investigations and clinical outcomes were collected. Also, time to progression (TTP) and overall survival (OS) were calculated. Results: The study included 103 patients representing about 2.2 % of the total number of patients visited clinical oncology department outpatients' clinic during the same period. Most of the patients were males, the mean age of the patients was 58 years, pain was the most common presenting symptom, and adenocarcinoma was the most common reported pathological subtype. Only 50.5% of the patients were fit to receive platinum combination chemotherapy. The median TTP was 2 months and the median OS was 3 months. Age, performance status & presenting symptom had statistically significant relation with TTP. While, the baseline performance status, presenting symptoms and pathological subtype had statistically significant relation with OS.

Conclusion: Carcinomas of unknown primary origin are not uncommon tumors in clinical oncology department, Menoufia University with wide varieties of clinical presentations. Baseline performance status, presenting symptoms and pathological subtype had statistically significant relation with OS.

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