The Gulf Journal of Oncology

Indexed By PubMed and Medline Database

Issue 26, January 2018
ISSN No. 2078-2101

The Official Journal of the Gulf Federation For Cancer Control
## Table of Contents

### Original Articles

**Cytomorphologic Spectrum of Hurthle Cell Lesions of Thyroid: A Study of 54 Cases** ................................................................. 06  
K.R. Anila, Nileena Nayak, Preethi Sara George, K. Jayasree

**Rosai–Dorfman Disease – Five Years Retrospective Analysis from Tertiary Cancer Center** .......................................................... 11  
K. Aradhana, B. Thejaswini, Shamsundar, R. Nanda, Usha Amritham, G.V. Giri

**Lung cancer epidemiology among the Bahraini population, 1998–2011** ...................................................................................... 18  
Najat Mohamed Abulfateh, Randah R. Hamadeh, Majida Fikree

**Epidemiology of Colorectal Cancer in Iraq, 2002–2014** .................................................................................................................. 23  
Safaudeen Abdulrahman Al Dahhan, Faris H. Al Lami

**Profile of High Grade Gliomas – A Single Center Experience** ........................................................................................................ 27  
Basharat Muttaba Jan, Arif Hussain Sarmast, Abdul Rashid Bhat, Altaf Rehman Kirmani

**Assessment of Sunitinib Alternative Prescription Schedules in Metastatic Kidney Cancer: A Study of 10 Cases** .................... 33  
Habib Diallo, Hasnae Alaoui Mhamdi, Salma Elouarzazi, Mohamed Fadli, Rhizlane Belbaraka

**Human Papilloma Virus (HPV) in Sinonasal Papillomas and Squamous Cell Carcinomas: A PCR–based Study of 60 cases** .......... 37  
Ambreen Beigh, Ruby Reshi, Sheikh Junaid, Mehnaz Sultan Khuroo, Summyia Farooq

**Cancer Statistics in Giresun Province, Turkey: a 12–Years Retrospective Review** ................................................................. 43  
Ayyeğlu Çebi, Egemen Akgün, Tuncer Öztürk, Esin Avcı

### Review Article

**Risk Factors of Cancer in the United Arab Emirates** ................................................................. 49  
Hira Abdul Razzak, Alya Harbi, Wael Shelpai, Ahmad Qawas

### Case Reports

**Lymphoid Proliferation in Eyelid: A Primary follicular lymphoma case** ................................................................. 58  
Deivy Cruzado-Sánchez, Walter Andree Tellez, Solon Serpa–Frias, Grisnery Maquera

**Transanal Minimally Invasive Surgery (TAMIS), First in Kuwait: A Case Report** ................................................................. 61  

**Tumor Recurrence at Donor Site of Pectoralis Major Myocutaneous Flap with Tumor–free Primary Oral Carcinoma** ................. 64  
Rakesh Kain, Suvashis Dash

**Vaginal Metastasis of Renal Clear-cell Cancer** ................................................................. 67  
Rehailia–Blanchard Amel, Morel Adeline, Rancoule Chiloe, He Ming/Xuan, Magné Nicolas, Falkowski Sabrina

**T cell Large Granular Lymphocytic Leukemia with Pulmonary Hypertension** ................................................................. 72  
Sidra Khalid, Hamed Daw, Miriam Jacob, Megan Nakashima

**Fatal Outcome of Recurrent Infantile Pelvic Desmoid Tumor Treated with Tamoxifene** ................................................................. 75  
Lamiae Amaadour, Zineb Benbrahim, Othmane Zouiten, Nezar Bourdi, Youssef Lamrani Aloufi, Asmae El Maziti, Nawal Hammaa, Nawfel Mellas

### Conference Highlights/Scientific Contributions

- News Notes .......................................................................................................................................................................................... 79
- Advertisements ..................................................................................................................................................................................... 83
- Scientific events in the GCC and the Arab World for 2018 ........................................................................................................... 84
Introduction

Cancer is the second leading cause of death after cardiovascular disease worldwide. Over 1.3 million new cases of cancer occur in the USA (1). The predicted numbers of new cancer cases as well as cancer deaths in the USA are 1,688,780 and 600,920 respectively (2). The American Cancer Society monitors and assesses the number of new cancer cases and the death ratio for the United States. According to the WHO, approximately 1,658,370 new cancer cases were projected in 2015 (3).

The classification of cancer cases was done according to the International Classification of Diseases for Oncology(4).

According to the Ministry of Health’s Turkey Cancer Statistics, cancer still remains the second cause of death following cardiac diseases from 2007 until to date of this study (5).

The IARC’s Globocan 2012 Report had stated that the overall age standardized cancer incidence rate was found 25% more in men than in women (rates of 205 and 165 per 100,000, respectively). The most common types of cancer worldwide include lung, prostate, colorectal, stomach and liver cancer among men; alongside breast, colorectal, uterus cervix, lung and uterus corpus among women (6).

In 1992, active cancer registries in Turkey had started to be collected after the first cancer registry center was established in the province of Izmir, this followed by the opening of the other branches in other provinces via the Turkish Ministry of Health. As of 2017, a total of 14 centers have been included as part of the Turkish cancer registry system. Just four of these centers (İzmir, Antalya, Edirne and Trabzon) assure IACR—level quality assessment (7).

The province of Giresun is situated in the Eastern Black Sea Region of Turkey, and has a population of 444,467 as...
on 2016 [8]. Only one state hospital serves with 350-bed adult facilities in the Central Giresun. The aim of this study is to analyze the distribution ratio of 6,613 diagnosed cancer cases over a 12–year period in the province of Giresun.

Material and Method

The records of 6,613 cancer cases between 2005–2016 were retrospectively evaluated from the records of Prof. Dr. A. İlhan Özdemir Education and Research Hospital. The data was extracted from the Data Processing Center through the use of screening. The Turkish Ministry of Health’s Early Cancer Screening, Diagnosing and Education Center has been in operation since 1999.

The classification used in the data analysis of the cancer types fell under two groups: i) “own names”, with a diagnosis of 1% and/or higher and ii) “other”, with a diagnosis of less than 1%. Thus, 5,983 patients were classed under the “own names” group; whilst, 630 patients were classed as “Other”. The MINITAB 15 package program was used in the analysis of the data. The summary of the statistics of the 6,613 patients, descriptive statistics and graphs for the ratio, mean and standard deviation are given. As the majority of the variables given are qualitative, the significance test statistics of the difference between the Chi-Square and the Two Ratios were used to explore the relationship between the variables.

Results

A total of 6613 cancer patients were enrolled in the study (3759 men, 56.8% and 2854 women, 43.2%). The mean of age was 66.27±17.17 (69.53±15.45 for men, 62.27±18.52 for women) (Table 1).

The types of cancers diagnosed over the aforementioned 12–year period were broken down as follows: prostate (n=917, 13.9%), breast (n=761, 11.5%), colorectal (n=714, 10.8%), skin (n=587, 8.9%), stomach (n=561, 8.5%), bronchus–lung (n=556, 8.4%), thyroid (n=511, 7.7%), bladder (n=442, 6.7%), brain (n=196, 3%), over (n=180, 2.7%) pancreas (n=160, 2.4%), connective and soft tissue (n=87, 1.3%), testis (n=86, 1.3%) and liver (n=79, 1.2%) cancer (Table 2).

It was determined that the most common types of cancer among men included prostate (24.4%), bronchus and lung (12.5%), colorectal (11.15%), bladder (10.2%) and stomach (8.8%) cancer; whereas for women it was found that breast (26%), thyroid (14.9%), skin (10.6%), colorectal (10.34%) and stomach (8.1%) cancer were among the most common cancer types observed. Breast (0.5%), liver (1.2%), connective and soft tissue (1.2%) cancer among men; whilst larynx (0.1%), kidney (0.6%) and liver (1.2%) cancer, among women were observed as being among the rare types of cancer diagnosed (Table 3).

The progression of cancer types by year is given in the following graphs (Figure 1–17). In 2007, the most frequently diagnosed cancer was that of the connective and soft tissue (n=46). Between 2005–2007 as well as 2011–2013, it was the least diagnosed type of cancer, whereby it continued to decline and then stabilize from 2009 onwards (Figure 1). The most diagnosed brain cancer cases had been seen in 2009 (n=40); this followed

Table 2: Summary of cancer types

<table>
<thead>
<tr>
<th>Cancer type</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>917</td>
<td>13.9</td>
</tr>
<tr>
<td>Breast</td>
<td>761</td>
<td>11.5</td>
</tr>
<tr>
<td>Colorectal</td>
<td>714</td>
<td>10.8</td>
</tr>
<tr>
<td>Other</td>
<td>630</td>
<td>9.5</td>
</tr>
<tr>
<td>Skin</td>
<td>587</td>
<td>8.9</td>
</tr>
<tr>
<td>Stomach</td>
<td>561</td>
<td>8.5</td>
</tr>
<tr>
<td>Bronchus or lung</td>
<td>556</td>
<td>8.4</td>
</tr>
<tr>
<td>Thyroid</td>
<td>511</td>
<td>7.7</td>
</tr>
<tr>
<td>Bladder</td>
<td>442</td>
<td>6.7</td>
</tr>
<tr>
<td>Brain</td>
<td>196</td>
<td>3</td>
</tr>
<tr>
<td>Over</td>
<td>180</td>
<td>2.7</td>
</tr>
<tr>
<td>Pancreas</td>
<td>160</td>
<td>2.4</td>
</tr>
<tr>
<td>Connective and soft tissue</td>
<td>87</td>
<td>1.3</td>
</tr>
<tr>
<td>Testis</td>
<td>86</td>
<td>1.3</td>
</tr>
<tr>
<td>Liver</td>
<td>79</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Table 1: Summary statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3759</td>
<td>56.8</td>
</tr>
<tr>
<td>Female</td>
<td>2854</td>
<td>43.2</td>
</tr>
<tr>
<td>Age</td>
<td>66.27±17.17</td>
<td></td>
</tr>
</tbody>
</table>
Figure 1: The number of connective and soft tissue cancer cases

Figure 2: The number of brain cancer cases

Figure 3: The number of bronchus and lung cancer cases

Figure 4: The number of skin cancer cases

Figure 5: The number of liver cancer cases

Figure 6: The number of colorectal cancer cases

Figure 7: The number of larynx cancer cases

Figure 8: The number of breast cancer cases
Figure 9. The number of bladder cancer cases

Figure 10. The number of stomach cancer cases

Figure 11. The number of over cancer cases

Figure 12. The number of pancreas cancer cases

Figure 13. The number of prostate cancer cases

Figure 14. The number of testis cancer cases

Figure 15. The number of thyroid cancer cases

Figure 16. The number of kidney cancer cases
first by a decline in 2010, and then another increase in 2016 (Figure 2). Bronchus and lung cancer was diagnosed mostly in 2009 (n=145); the least between 2005–2006. It decreased again in 2010 (Figure 3). The number of skin cancer cases had reached its peak in 2009 (n=114). This then had fallen rapidly in 2011, and then rose again in 2016 (Figure 4). The liver and colorectal cancer cases were observed at the most in 2007 (n=17 and n=94, respectively) (Figure 5–6). Larynx cancer cases were the highest in 2008 (n=23), at the lowest in 2005–2006 (Figure 7). Breast cancer cases were recorded mostly in 2011 (n=92) (Figure 8). Bladder cancer cases were at the highest in 2016 (n=62) (Figure 9).

The number of stomach and liver cancer cases were at the highest number in 2007 (n=177 and n=109, respectively) (Figure 10–11). Pancreas cancer cases were observed at the highest number in 2008 (n=23) (Figure 12). The most number of prostate cancer cases were diagnosed in 2007 (n=155) (Figure 13). The most number of testis and thyroid cancer cases were recorded in 2008 (n=23) (Figure 14–15). Kidney cancer cases were the most level in 2016 (n=16) (Figure 16). The least number of cases of brain, skin, kidney/renal, liver, colon, breast, bladder, stomach, ovarian, pancreatic, prostate, rectum, testicular and thyroid cancer were observed in 2005 (Figure 1–16). The highest total number of cancer diagnoses was observed in 2007, whilst the least total number was seen in 2005 (Figure 17).

**Discussion**

According to the IARC Globocan 2012 Report, 14.1 million new cancer cases worldwide have been diagnosed, alongside the occurrence of some 8.2 million cancer–related deaths. However, 32.6 million people worldwide have survived within 5 years of being diagnosed [8]. Our aim in this study was to analyze 6,613 cancer cases between 2005 and 2016 within the province of Giresun. We unfortunately were unable to obtain the mortality data from the hospital due the local cancer registration system being unable to provide the requested information.

According to our data, the most common types of cancer found within the province of Giresun included prostate (13.9%), breast (11.5%), colorectal (10.8%), skin (8.9%) and stomach (8.5%); whilst the least common types of cancer found included liver (1.2%), testis (1.3%), connective and soft tissue (1.3%), pancreas (2.4%) and over (2.7%) cancer, respectively and for both genders (Table 2). In terms of gender, it was determined that the most common cancer types were prostate (24.4%), bronchus and lung (12.5%), colorectal (11.15%), bladder (10.2%) and stomach (8.8%) among men, whereas breast (26%), thyroid (14.9%), skin (10.6%), colorectal (10.34%) and stomach (8.1%) among women, respectively.

The Turkish Ministry of Health’s combined database had published the statistics for the most common types of cancer observed in Turkey according to gender. Accordingly, the cancers of lung, prostate, colorectal, bladder and stomach are the first orders among men, whereas breast, thyroid, colorectal, corpus uteri and lung among women, respectively in 2014 [9].
GLOBOCAN 2012 cancer data statistics had revealed that worldwide lung, prostate, colorectal, stomach, and liver cancer were the most common types of cancer seen in men; whilst breast, colorectal, cervix uteri, lung and corpus uteri cancer were the most common types of cancer seen in women \(^6\).

The IARC has published that prostate, lung, colorectal, bladder and kidney/renal cancer are the most widespread among men both in the EU and the USA. The cancers of breast, colorectal, lung, corpus uteri and cervix uteri are the most frequent in the EU while breast, lung, colorectal, thyroid and uterus in the USA for women \(^6\). Our results are consistent with EU and USA among men; it is not consistent with the world and Turkey. On the other hand, first two orders of our results, breast and thyroid, are same in terms of the most common cancer types with Turkey among women. Thyroid cancer is the second most common cancer type diagnosed in both Giresun and Turkey as a whole. Thyroid cancer incidence rates are conspicuously 3 times higher in women than in men (21 vs 7 per 100,000 population), despite death rates (0.5 per 100,000 population) being equivalent to those of the USA\(^6\). According to Globocan data, within the province of Trabzon (which is a big city, close to 150 km away from Giresun), the most common types of cancer seen among women include breast, skin, thyroid, stomach, and colon cancer \(^\).

In our study, we found that incident rates of kidney, bronchus and lung, skin, larynx, breast, bladder, and thyroid cancer among both genders within Giresun appear to be statistically significant over 12–year period we had examined (Table 3).

Our data states that the highest rate of cancer diagnoses in Giresun occurred between 2007 and 2009. However, diagnoses of breast cancer were at their highest peak in 2011 (Figure 8), alongside bladder and kidney cancer in 2016 (Figure 9, 16). Over the 12–year period we surveyed, the highest total number of cancer diagnoses to appear in Giresun was 925 in the year 2007; the lowest number of diagnosed cases was 15 in the year 2005 (Figure 17). Cancer Early Diagnosis Center (KETEM) effectively started to collect data at Prof. Dr. A. İlhan Özdemir Education and Research Hospital in 2007 and then it associated with the Public Health Management in the following years. The reason of decrease in the number of registered cancer cases may be related to this merge.

As a conclusion, we evaluated the prevalence of 6,613 diagnosed cancer cases in province of Giresun over a 12–year period. One limitation in this study is that it does not contain data regarding cancer survival rates. Our findings can be considered as an overview of cancer cases in the province of Giresun and could be used for future cancer studies in Giresun and Turkey as a whole.

**References**