## Comparative study of cancer in AL-Diwanihyia governerate before and after the war 2003

*Dr. Aqeel reheem AL- Barqawi **Rabab hajoal * F.I.C.M.S Qadisia university college of medicin **chief head of physics/ Qadisia university college of medicin

## Abstract

The aim Of the study to compare the occurrence of cancer in Al Diwaniya city before and after the war 2003.
The result show increase the number of carcinoma cases from the year 1992 - 2006 the number of cases was doubled from the years 1992 - 2002 and the doubled nine times after the years 2003 in comparison to the years 1989 - 1992 the study show most of cases are lived in the urbon area .

## Introducation

Malignancy in general avers as a consecuancy of mutations in the DNA of at least one cell which then no longer behaves like its normal neighbors . the mutation give malignant cells acquire the ability to invade causes local spread and distant metastesis . the scientist proved that there is many facters lead to the development of cancer on of them was irridation exposure .
The effect of urinuim :

1. Enter through the respiration system causing Ca . lung .
2. Enter through G.I.T. causing Ca. liver, stomach, blood and bone

3 . Enter through skin causing skin cancer.

## Material \& methods

The information of this study is extracted from the records of patients in the cancer centres in Al Diwaniya general hospital and in pediatric and obstetric hospital.
The information was calculated according to sex, age , disease , and religion of the patients .

Patient who smok, the family history of cancer excluded from this study .

## The result

The result show that in crease the number of cases suffering from carcinoma from the years 1992-2006 the number of cares is doubled from the 1992-2002 in comparison with cases from 1988-1991 table no(1). figure (1).

| Years | No of cares |
| :---: | :---: |
| 1988 | 8 |
| 1989 | 12 |
| 1990 | 10 |
| 1991 | 6 |

From the years 1992-2002 the cases is doubled as shown in the table No.(2). Fig(1).

|  |  |
| :---: | :---: |
| 1992 | 30 |
| 1993 | 184 |
| 1994 | 22 |
| 1995 | 53 |
| 1996 | 38 |
| 1997 | 117 |
| 1998 | 104 |
| 1998 | 61 |
| 2000 | 126 |
| 2001 | 163 |
| 2002 | 132 |

In 1992 the number of cases was (30) cases as shown in fig (2) .the commonest type of cancer estimated was ca. colon in apercentage of $(23.2 \%)$ and the second most common is ca.uterus in apercentage of ( $16.6 \%$ ) most of the cases are female in percentage of (58.7\%) and male in apercentage of $a(43.3 \%)$
-In 1993 the no. of cases was (184) cases as shown in
fig ( 3 ) . the commonest type of cancer estimated was ca.bronchus in apercentage of (15.2\%) then hematological malignancy in apercentage of ( $14.6 \%$ ) then ca. ovaries ( $12.5 \%$ ) most of the cases was male (53.8\%) and female (46.2\%) .
-In 1994 the no. of cases was (22) cases as shown in fig(4). the commonest type of cancer was ca.bronchus (36.6\%) then hematologial malignany
( $22.7 \%$ ) then ca.uterus and ca.liver ( $13.6 \%$ ) most of the cases are male (54.5\%) and female(45.5\%).
-In 1995 the no . of cases was (53) cases as shown in fig(5). the most common type was ca. colon ( $22.6 \%$ ) then sigmoid colon ( $18.8 \%$ ) then hematologial malignancy ( $16.9 \%$ ) most of the cases are male ( $73.58 \%$ ) and female ( $26.41 \%$ )
-In 1996 the no. of cases was (38) cases as shown in fig(6). the most common type was ca.colon ( $61 \%$ ) then G.I.T. malignany (18.4\%) , most of cases are male ( $78.9 \%$ ) female ( $21 \%$ ).
-In 1997 the no. of cases was (117) cases as shown in fig(7), the most common type of cancer was ca.bronchus (17.9\%) then hemotogical malignancy
( $16.2 \%$ ) then G.I.T. malignancy (11.9\%) then hemotogical malignancy ca.bladder ( $10.2 \%$ ) most of cases are male then female.
-In 1998 the no. of cases was (104) cases the most common type of cancer was ca.bronchus (18.2) then (15.3\%) the ca.breast , ca. bladder ( $9.6 \%$ ) ,ca.liver ( $6.7 \%$ ) most of cases were male ( $57.6 \%$ ) and female ( $42.3 \%$ ) as shown in fig(8)
-In 1999 the no . of cases was (61) cases . the commonest type of cases was ca.breast( $16 \%$ ) ca.bronchus , larynx , hematological malignancy ( $12 \%$ ) ,ca.liver ( $10 \%$ ) , most of the cases are male in as shown in fig (9) of (49.18\%) and female (50,81\%)
-In 2000 the no.of cases was (126) cases as shown in fig(10),the commonest type of cancer was hematological_malignamy and
ca.breast (16.6\%) the ca.bronchus (14.2\%) then ca.larynx (10.3\%) most of the cases were male( $52.3 \%$ ) and female (47.6\%).
-In 2001 the no.of cases was (163) cases as shown in fig(11). the commonest type of cancer was hematogical malagnancy (17\%) ca.bronchus ( $15.3 \%$ ) ca.breast ( $11 \%$ ) most of the cases were male ( $52 \%$ ) and ( $47.8 \%$ ) for female .
-In 2002 the no. of cases was (123) cases as shown in fig (12) the most common tumor was ca.bronchus(19.6\%) hematological malignancy ( $16.6 \%$ ) ca bladder ( $9 \%$ ).most of the cases were male (56\%) and for female (43.9\%).
-In 2003 the no . of cases was (182) cases as shown in fig(13) the common type of tumor was homatological malignancy ( $20.3 \%$ ) ca.brochus ( $18.6 \%$ ) most of the cases were (59.3\%) and female (40.6\%) .
-In 2004 the no . of cases was (339) cases as shawn in fig(14) the commonest type of tumor was ca.uterus(10.6\%) ca.bladder ( $10.3 \%$ ) hematological malignancy ( $9.4 \%$ ) most of the cases were female (55\%) and male (44\%).
-In 2005 the no. of cases was (326) cases as shown in fig(15) the commonest type of tumor was ca.breast (13\%) homatological malignancy ( $11.3 \%$ ) ca.uterus ( $7.6 \%$ ) most of were male (50.6\%) and famle (49.3\%).
-In 2006 the no of cases was (151) cases as shown in fig (16) the most common type of tumor was homatological malignancy ( $24.5 \%$ ) and ca.bronchus ( $15.8 \%$ ) then ca.breast ( $13.2 \%$ ) most of cases were male ( $60 \%$ ) female ( $39.7 \%$ ).

The result shown that most of the cases reported live in urban then in rural area
In 2002 ( $77.2 \%$ ) urban ( $22.8 \%$ ) in rural area as shown in fig(18) fig(19) In 2003 ( $78.5 \%$ ) in urban, ( $21.5 \%$ ) in rura area as shown figure (19 In 2004 ( $66 \%$ ) in urban ( $34 \%$ ) in rura area as shown in fig(20)

In 2005 (73.9\%) in urban (26.7\%) in rural area as shown in fig(21) In 2006 ( $75.4 \%$ ) in urban ( $24.5 \%$ ) in rural area as shown in fig(22)

## Discussion

1.In our study we found that the number of carcinoma is doubled from the 1992 - 2002 and this is similar to study done by El Hamzauy et al who found that the no. cancer is increased after American aggression to iraq in 1991.
2. The study also show increased in number of cases to all age group and to all types of cancer and this mostly due to the irradiation used by the American aggression and this result is similar to the result of El Hamzauy etal who show increase in number of Ca . stomach in this period.
3. In 1998 the researcher proved that part of Iraq contain uranium .

Increase in number of cases of carcinoma to all age group.
4. Increase in mortality rate between pediatric age group and to all other groups.
5. The appearance of congenital anomalies e.g. in 1993 there is (27) cases in 1994 there is (160) cases .

Fig (1)


Fig (2)


Fig (3)


Fig4


Fig (5)


Fig (6)


Fig (7)


Fig (8)


Fig (9)
NO. of cases for 1999


Fig (10)


Fig (11)


Fig (12)


Fig (13)


Fig (14)


Fig (15)


Fig (16)


Fig 17 In 2001 (69.9\%) urban, (30.1\%) in urban

\%69.9

Fig 18In 2002 (77.2\%) urban , (22.8\%) in rural area


Fig 19In 2003 (78.5\%) urban , (21.5\%) in rural area

\%78.5

Fig 20 In 2004 (66\%) urban, (34\%) in rural area


Fig :21 In 2005 (73.3\%) urban, (26.7\%) in rural area


Fig 22 In 2006 (75.4\%) urban , (24.5\%) in rural area

## 24.5


75.4

## References

1. Christopher Hasslet ,Edward Chilvers etal, Davidsons principles and practice of medicine , 19 ${ }^{\text {th }}$ ed. , 2002 : p 212-213.
2. Dr. Ali AL Hamzawi etal, compartive study of the incidence of carcinoma of stomach in Iraq before and after American aggression , Journal of Al Qadissiaya Vol. 7; 1; 2002: 12 - 18 .
3. Al-tameemi K. Etal pollution of the environment with uranium ,health and environement, June $6 ; 2001: 7$.
4. society of protection of health and environment the effect of irridation, Environment protection January ;1999: 1.

المصادر العربية
5. اليور انيم المنضب ، مجلس السرطان في العراق ، 14 آذار 2000: 2 . 6. البيئة و الصحة : دائرة صحة بابل ، قسم حماية وتحسين البيئة : ايلول 1999 : 19 7. الطاقة الذرية واستخداماتها : ج 4 : 1989 : 39 ت . 8. تثقرير عن لجنة الطاقة الذرية العر اقية ، وزارة الصحة ، بار با بغداد 1982 ـ 9. الانسان والاحياء وتكوين مرض السرطان /بغداد/مطبعة الزمان/أنور خضير عبودي جارك 10. بايلوجيا التلوث : تأليف ميلاني / ترجمة أزهار الصابونجي /مطبعة شار ع المتنبي / بغداد

