Journal of Research in Medical and Dental Sciences
Volume 5, Issue 1, Page No: 19-22

Available Online at: www.jrmds.in
eISSN No. 2347-2367: pISSN No. 2347-2545

An overview of malignancy cases reported on histopathology over a Span of 5 years (2011-2015) at Terna Medical College, Nerul, Navi Mumbai

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DOI: 10.5455/jrmds.2017514

ABSTRACT

The incidence and burden of cancer is huge and is set to rise. Cancer kills more people on a global scale than AIDS, malaria and TB combined, hence proving to be the most fatal disease for our Society. The aim of this study is to evaluate the most common organ malignancy amongst all System Organ Malignancies. We present a brief review of malignancy cases studied at Terna Medical College, Navi Mumbai over a span of 5 years (2011-2015). Study was undertaken at Terna Medical College, Nerul, Navi Mumbai for 5 Years (2011-2015) for:-Malignant Cases and System Organ Specific Malignancies. We have studied Total of 5495 Cases out of which 172 turned out to be malignant over a span of 5 Years (2011-2015). Out of these 172 Malignant Cases, Female Genital System, Breast & Oral Cavity Cancers together account for 79 Percent (135 Cases). In view of the above, we have concluded that Female Genital System, Breast & Oral Cavity cancers are Top Three Malignancies among all System Organ Specific Malignancies.

Key words: - Worldwide, Killer, Cancer, Global, Trend

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Received: 10/11/2016
Accepted: 25/02/2017

INTRODUCTION

Cancer is a class of diseases characterized by out-of-control cell growth. There are over 100 different types of cancer, and each is classified by the type of cell that is initially affected. Not all growths (tumors) are cancerous. They can be benign (not cancerous) or malignant (cancerous). Benign tumors are slow-growing and not as dangerous as malignant tumors which usually grow rapidly and may spread to other body sites.

According to the American Cancer Society, Cancer is the second most common cause of death in the US and accounts for nearly 1 of every 4 deaths. The World Health Organization estimates that, worldwide, there were 14 million new cancer cases and 8.2 million cancer-related deaths in 2012.

Year wise total cancer prevalence in India

Throughout history of human civilization, cancer has been a major health problem. [1]Among various diseases cancer has become a big threat to human beings globally. In spite of various medications, millions of people are dying every year due to cancer. As per Indian population census date, the rate of mortality due to cancer in India is high and alarming with about 80,600 existing cases by the end of last century. [2] In our study we presented a review of cases of malignancy in 5 years.

MATERIALS AND METHODS

We have studied a total of 5495 cases over a span of 5 years (2011-2015),out of which 172 cases turned out to be malignant. Out of these 172 Malignant Cases, Female Genital System-54 Cases (31.3%), Breast Cancer-36 Cases (20.9%) and Oral Cavity Cancer - 45 Cases(26.1%) together account for 135 Cases (78.3%). Rest all system organ specific malignancy together account for 37 Cases (21.7%).

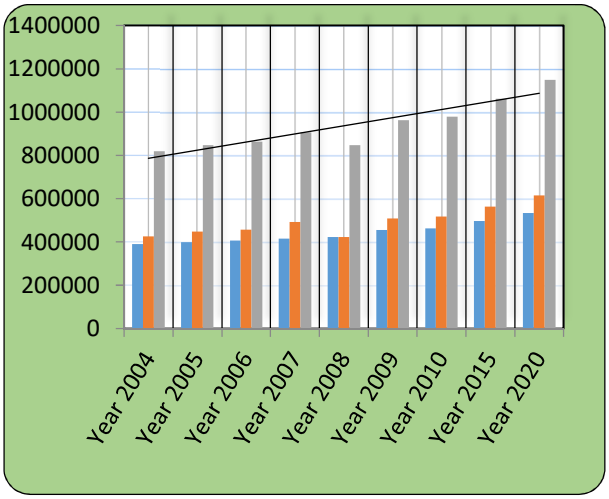

Figure-1-Total Cancer Patients India

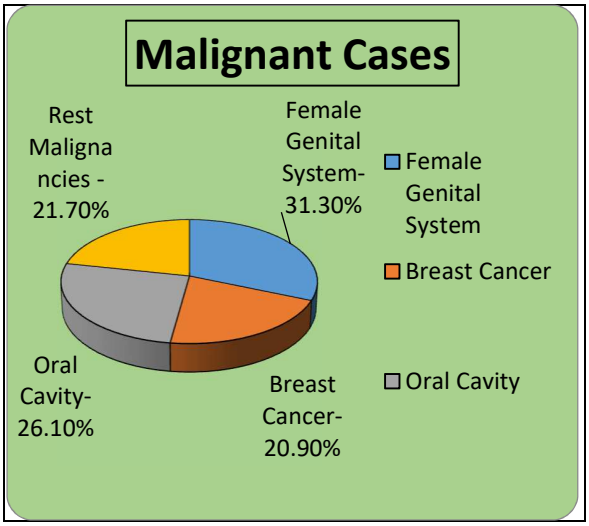

Figure-2

RESULTS

It has been observed that Female Genital System, breast & oral Cavity malignancies are more common than malignancies of other system. Gastro Intestinal tract, Thyroid, Skin, Male Genital System & Lymph Node malignancies are at borderline level. Bone, Soft Tissue, Gall Bladder , Pancreas, Larynx & vocal cord are rare malignancies.

*Out of 172 malignant cases, m*aximum (44 cases; 25.5%) belongs to 40-60 yrs age group & minimum (1case; 0.58 %) belongs to 0-20 &80-10 yrs age group. Out of 172 malignant cases, 109 cases (63.3%) are females and 63 cases(36.6%) are males. Out of 172 malignant cases,126 cases (73.2%) belongs to rural area, while 46 cases (26.7%) belongs to urban area. Out of 172 malignant cases 107 cases (62.2%) are illiterate, while 65 cases (37.7%) are literate. Out of 172 malignant cases 102 cases (59.3%) belong to low socio economic background, while 70 cases (40.6%) belongs to high socio economic background.

DISCUSSION

Cancer has over taken heart disease as the world`s top killer in 2011. [3]Part of the trend will be ,more than double global cancer cases will cause death by 2030 according to study by WHO.[4]Over 8,00,000 new cases are diagnosed; 5,50,000 deaths occur annually due to cancer in India.[5]The dramatic increase in mortality and morbidity due to cancer is a matter of concern for the society. At a given point of time nearly 25 million case of cancer are recorded in India. Gynecology cancers form a huge burden of morbidity and mortality in India. In our study, we reported 54 cases of female genital tract malignancies which included Endometrium ,Cervix, Ovary, Vagina & Vulva .The age standardized rates range for gynecology cancers is 28.3 per 100000 women worldwide. In our study, we have reported 36 breast malignancies. Breast carcinoma is the most common malignant tumor and the leading cause of death in women, with more than 1,000,000 cases occurring worldwide annually.[7]In the United States, each year approximately 1,00,000 new cases are diagnosed and approximately 30,000 patient die from the disease. The incidence is high in North America and Northern Europe (91.4 new cases per 100,000 women/year), intermediate in southern Europe and Latin American countries, and low in most Asian and African countries. In the United States, there has been a sharp increase in the detection of breast carcinoma ,largely due to the widespread use of mammography.[8]

Worldwide, breast cancer is the most common invasive cancer in women. Breast cancer comprises 22.9% invasive cancer in women & 16% of all female cancers. In 2008, breast cancer caused 458,503 deaths worldwide. The number of cases worldwide has significantly increased since 1970`s, a phenomenon partly attributed to the modern lifestyles. The incidence of breast cancer varies greatly around the world. It is lowest in less developed countries.[9]Worldwide breast cancer is

the most frequently diagnosed life threatening cancer in women. In our study, we reported 45 oral malignancies in 5 yrs, including lip, tongue, tonsils, buccalmucosa , salivary glands, etc. Oral cancer are in the top three of all malignancies in India which account for over 30% of all cancers reported in the country .Oral cancer control is quickly becoming a global health problem. Oral cancer is of significant public health importance in India.[10]Oral cancer is the number one killer cancer in India. Annually over 300,000 new cases of oral cancer are detected over the world. It is an important public health matter which is responsible for 3% to 10% of cancer mortality worldwide.

Oral cancer is the most common cancer in India, as 30% of all cancers are oral cancers. [11,10] Annually,130,000 people succumb to oral cancer in India, which proceed to approximately 84,000 deaths in 1990. [11]In India, the age standardized incidence rate of oral cancer is reported 12.6 percent per 100,000 people. [11] We have also studied, system-organ specific malignancies over a span of 5years 2011-2015

Table 1

Year	Total Cases studied	Cases with malignancy
2011	1020	20
2012	1145	34
2013	1140	42
2014	965	41
2015	1225	35
Total	5495	172

Table-2

Larynx = 2(1.1%)	**Breast=36(20.9%)**	Lymph Node=5 (2.9%)
Vocal cord = 1 (0.5%)	**FGS=54 (31.3%)**	Thyroid=6(3.4%)
Oral Cavity = 45(26.1%)	MGS =5(2.9%)	
GIT = 6 (3.4%)	Skin=5(2.9%)	
Gall Bladder= 2(1.1%)	Soft tissue= 2(1.1%)	
Pancreas= 1(0.5%)	Bone = 2 (1.1%)	
Total = 57	Total= 104	Total= 11

Table-3

Age	**Malignant Cases**	**Sex**		**Geography**		**Education**		**Economic Background**	
(Years)		*M*	*F*	*Urban*	*Rural*	*Literate*	*Illiterate*	*High*	*Low*
0-20	01	00	01	00	01	00	01	00	01
20-40	24	08	16	05	19	07	17	06	18
40-60	118	44	74	33	85	39	79	43	75
60-80	28	12	16	08	20	10	18	11	75
80-100	01	00	01	00	01	00	01	00	01
Total	172	63	109	46	126	65	107	70	102
Percent		**36.6**	**63.3**	**26.7**	**73.2**	**37.7**	**62.2**	**40.6**	**59.3**

CONCLUSION

In our study of 5 years cases of malignancy (2011-2015) at Terna Medical College, Nerul, Navi Mumbai, **we concluded, Female Genital System, Breast & Oral cavity are top three malignancies** than the rest of other system organ specific malignancies .

REFERENCES

1. Ali I, Wani WA, Haque A, Saleem K.Glutamic acid and its derivatives. Candidates for rational design of anticancer drugs. Future Med Chem. 2013,May;5(8):961-78.
2. Ali I, Wani WA, Saleem K. Cancer scenario in India with Future perspectives. Cancer therapy 2011;8:56-70.Falco M. WHO: Cancer to Surpass Heart Disease as World's Leading Killer 2008. Available from:http://edition.cnn.com/2008/HEALTH/12/09/cancer.leading. killer/index.html). [Accessed on May 2,2016].
3. Boyle P. The globalization of cancer. Lancet 2006;368:629-30.

4. Das S, Patro K C. Cancer care in the rural areas of India: A firsthand experience of a clinical oncologist and review of literatures. J Can Res Ther 2010;6:299-303.
5. Population Fact sheets: World. International Agency for Research on Cancer, World Health organization, Cancer Today. Available from: http://gco.iarc.fr/today/fact-sheets-populations?population=900&sex=2#collapse5.[Accessed on May 22, 2016]
6. Parkin DM, Bray F, Ferlay J, Pisani P. Estimating the world cancer burden. Globocan 2000. Int J Cancer 2001 Oct 15;94(2):153-6.
7. Sondik EJ. Breast cancer trends. Incidence, mortality and survival. Cancer 1994 Aug 1;74 (3Suppl):995-9.
8. Breast Cancer Treatment Protocols: Medscape,2016. Available from: http://emedicine.medscape.com/article/2006464-overview. [Accessed on October 17,2016].
9. Coelho KR. Challenges of the oral cancer burden in India. Journal of Cancer Epidemiology volume[Article ID 701932]. 2012 [cited 2012][17 p]. Available from:
10. http://www.hindawi.com/journals/jce/2012/701932/
11. GBD 2013 Mortality and Causes of Death Collaborators. Global, regional, and national age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet 2015 January 10;385(9963):117-171.
12. Poul Erik Petersen, editor. Strengthening the prevention of oral cancer:the WHO perspective. Community Dent Oral Epidemiol 2005;33:397-9.