



## INCIDENTS OF CANCER AT THE ESOPHAGUS IN TRIPURA BY HISTOLOGICAL TYPE – 2010-2014 AT REGIONAL CANCER CENTRE, AGARTALA, TRIPURA.

### Oncology

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### ABSTRACT

**Purpose:** To know the site at incidence at esophageal cancer in male & female common age group and Histopathological sub types.

**Methods:** Total number of patients 720 (Male 485) and (Female 235), age group 0-75 years, data Collection from Regional Cancer Centre, Agartala Tripura 2010-2014.

**Result:** Common age group 55-60 common site middle 1/3rd followed by lower 1/3rd. histopathologically most of the patient are diagnose Squamous cell carcinoma.

**Discussion:** Most of the patients are 5th & 6th decades of life. Number of patient are diagnose Squamous cell carcinoma as an over cancer affect the middle 1/3rd followed by lower 1/3rd of Esophagus.

### KEYWORDS

#### Introduction:

Esophageal cancer is the eight most common cause of cancer death of world wide. There are two main histopathological sub-types; Squamous cell carcinoma is the pre-dominant histological sub-type. Adenocarcinoma is the mainly a disease at developed countries. The incidence of Squamous cell carcinoma is black males in the United States is five times higher than the white male. 18.6% per 1,00,000 and 3.0% per 100 thousand respectively. The incidents in men is pre-dominant in many areas such as India, China, Singapore and Taiwan is the ratio at nearly 2:1. Carcinoma at the esophagus affects the elder generation (5th & 6th decade) more commonly.

The natural history of Squamous cell carcinoma and Adenocarcinoma at esophagus appears to differ substantially. For Squamous cell cancers, transition model have described Squamous epithelium undergoing inflammatory changes that progress to dysplasia and in-situ malignant change. Most Adenocarcinoma, however trend to raise in the distal esophagus from columnar line metaplastic epithelium, commonly known as Barrett's esophagus.

In India, consumption of tobacco in-form of smoking and betel nut chewing, consumption of spicy food is especially red chili 77gm per month, low calorie, low protein diet, iron and vitamin deficiency with their synergistic action are to be risk factor.

**Methods:** During the year of 2010-2014 data are collected from Regional Cancer Centre, Agartala is the most important factor on the reliability of the data collected and incident case of cancer dependency. Cancer of esophagus, diagnosis is made by endoscopically and radiologically. The site of tumor was estimated endoscopically with reference point from incisor teeth to gastro esophageal junction and divided into upper third (15-24cm), middle third (25-33cm) and lower third (34-42cm) at the esophagus. Data obtained from the patient records according to age, gender also proper diagnosis either radiologically or histologically esophageal carcinoma.

**Result:** A total number of 720 patients are registered at Regional Cancer Centre, Agartala, Tripura. During the year of 2010-2014 among them male patient are 485 numbers and female 235. Number of incident of esophageal cancer by 5 years age group (0-75) is as below.

**Table I: - Number of Cancer Incident by Five Years Age Group (Icd-10).**

Age Group	00	05	10	15	20	25	30	35	40	45	50	55	60	65	70	75	TOTAL
	04	09	14	19	24	29	34	39	44	49	54	59	64	69	75	≥	
Male	-	-	-	-	-	-	6	4	22	35	74	90	85	65	58	46	485
Female	-	-	-	-	2	-	3	7	7	20	29	34	47	37	25	24	235
																	720

**Histological Type:** Common histopathological sub type of cancer esophagus was Squamous cell carcinoma 465 (M-305, F-160) and Adenocarcinoma was 255 patient (M-150, F-75). The ratio of Squamous cell carcinoma to Adenocarcinoma is 31:17.

**Table II: - Histopathological Sub Type.**

Number of Patients	Squamous cell carcinoma	Adenocarcinoma	
Male	485	305	180
Female	235	160	75

The majority of the esophageal cancer were found in the middle one third, total 380 patient (M-51.55%, F-56.03%) followed by lower one third 250 patient (M-34.02%, F-36.17%) and upper one third was only 90 patient (M-14.43%, F-8.51%).

**Table III: - Distribution of Esophageal Cancer (Site).**

Site	Male (485)	%	Female (235)	%
Upper 1/3 <sup>rd</sup>	70	14.43	20	8.51
Middle 1/3 <sup>rd</sup>	250	51.55	130	56.03
Lower 1/3 <sup>rd</sup>	165	34.02	85	36.17

**Discussion:** I found that the peak incidence is observed among Men in the age group of 55-54 and among Female it is 60-64 age groups, male female ratio is 2:1. This is similar result of the other studies reported in Africa (Malawi, Mozambique, Uganda and Kenya).

Squamous cell carcinoma was found to be most common histopathological sub type in the study with 465 patients as compared to Adenocarcinoma which was only 255 patients with male to female ratio of 2:1. There is finding similar result in Kenya. Most of the cancer at the esophagus study is found in the middle one-third of the esophagus 350 followed by lower third esophagus 220 patients and upper one-third 90 patients.

The Study conducted by P. B. Desai April 1969 found that the Cancer of middle segments is most common and the most debated as regards management. Another study conducted by Cherian JV et al 2007 shows

Squamous cell carcinoma was most common malignancy seen in 912 (92%) patient and 82 patients (8%) had Adenocarcinoma.

The lower esophageal cancer out number in the mid esophageal cancer in the forth former represent most common site of malignancy. However another study in Kenya found that lower third of esophagus most common location for the tumor followed close by middle third.

**Conclusion:** Squamous cell carcinoma is the common histopathological sub type in the geographical location, affecting more males than the females. Over all cancer of the esophagus is mainly affect the middle one third followed by lower one third is the region.

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