



## COMPARATIVE STUDY OF G.I.T CARCINOMA IN TRIBAL AND NON-TRIBAL POPULATION OF JHARKHAND COMING TO RIMS, RANCHI

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### ABSTRACT

#### INTRODUCTION-

A great evidence is now available to show that rise in the incidence of GIT carcinoma.<sup>[1]</sup> It varies from race to race and place to place as per time.<sup>[1]</sup> The incidence among the tribal population is higher than non-tribal population. It is evident therefore that environmental factors, food habits and excess consumption of alcohol and tobacco play an important role in the development of GIT cancer, that may be preventable.

**KEYWORDS :** GIT carcinoma, alcohol, tobacco, mineral salts, tribal , non-tribal.

#### ETIOLOGICAL FACTORS-

The most striking observation in rapid rise in incidence of GIT cancer during last 10 years has also occurred in many other countries other than India.<sup>[1]</sup> Some countries but not all which originally show a high incidence of GIT carcinoma. The rise in incidence of GIT carcinomas are more common in males than in females. The variation of incidence among the countries are at least 10 folds. GIT cancer is more common in Japan, Iceland, China, Chile, India, Africa and South America.<sup>[1]</sup>

It is more common in Asian and African population compared to rest of the world and it has risen to a considerable extent.<sup>[1]</sup> In industrialized countries, it is noticeable that GIT carcinoma occurs principally more among the poor population and mostly in India and Africa. It is more common in tribal population.<sup>[1]</sup>

The rise in incidence of GIT carcinoma in tribal population of Jharkhand is mainly due to the following etiological factors. They are:<sup>[1]</sup>

1. Consumption of alcohol,
2. Consumption of mineral salts and
3. Consumption of tobacco in various forms.

It is believed that high consumption of alcohol is showing a relative increase in the incidence of the disease.<sup>[1]</sup> Alcoholic men and women have higher chances of getting the disease. There is high content of mineral salts in the soils of Jharkhand. Consumption of these mineral salts in high amount in low socio economic population is through food habits and water intake. Consumption of tobacco is also related to the incidence of the disease. The consumption of various forms of tobacco among the tribal people of Jharkhand is rising having a direct impact on the disease's incidence.

#### GENETIC FACTORS-

For all the types of G.I. cancer there is evidence, that simple genetic factors may sometimes play a part in determining susceptibility to the disease.<sup>[1]</sup> By themselves, they are unlikely to be of overriding importance in more than a small proportion of cases; but the knowledge of them may help to elucidate the nature of an environmental factor, by allowing a high risk group to be defined in which the action of a carcinogenic factor can be more easily recognized.<sup>[1]</sup>

#### MATERIAL AND METHODS-

The inclusion criteria includes the following:

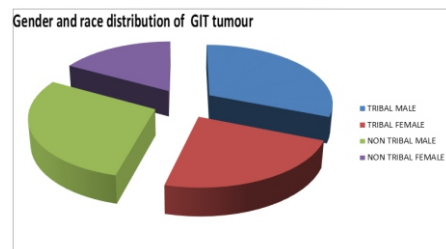
1. Patients of age group 20-60 years diagnosed with GIT carcinoma who visited RIMS, Ranchi, department of pathology,
2. Time duration was 1st June 2015 to 30th June 2017. They include information related to alcohol and tobacco consumption and their food habits. Diagnostic outcome was extracted from RIMS Pathology department and patient record.

#### RESULT-

Total 78 cases were registered during time period of 1st June, 2015 to 30th June, 2017. Out of which 42(54%) cases were from tribal population, it includes 18(23%) females and 24(31%) males cases. M:F ratio is 1.35:1. Non-tribal included 36(46%) cases, out of which 13 females (17%) and 23 (29%) males. M:F ratio is 1.76:1.

**TABLE 1 Gender and race distribution of GIT tumor in age in between 20 to 60 years-**

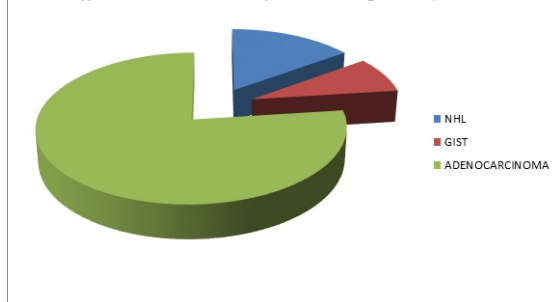
TRIBAL	NON-TRIBAL
MALE : 24(31%)	MALE : 23(29%)
FEMALE : 18(23%)	FEMALE : 13(17%)
TOTAL : 42(54%)	TOTAL : 36(46%)



**TABLE 2: Different types of GIT carcinoma in all patients coming to RIMS, Ranchi age between 20 to 60 years**

NHL	12	15%
GIST	06	08%
ADENO CARCINOMA	60	77%

Different type of GIT carcinoma in all patients coming to RIMS, Ranchi



#### DISCUSSION-

This report presents a comprehensive overview of different types of GIT carcinoma in age, sex and race distribution and histo-morphological types of 78 patients and has a comparative study between tribal and non-tribal population attending RIMS, Ranchi.[2,3] Our observation is that 54% tribal and 46% non-tribal population aged between 20 to 60 years have GIT carcinoma. TRIBAL: NON-TRIBAL ratio is 1.17:1. Out of 54% (42) of tribal population, 31% (24) are males and 23% (18) are females. Out of 46% (36) non-tribal people, 29% (23) are males and 17% (13) are females. There is high incidence of GIT carcinoma in tribal people as compared to non-tribal, due to consumption of high amount of alcohol and tobacco in both male and females. There is presence of high amount of mineral salts in soil of Jharkhand which is consumed by food habits and drinking water. All these risk factors are modifiable.

#### CONCLUSION-

GIT tumors impose a major burden on morbidity and henceforth on mortality in today's scenario. So as in our findings which suggest that consumption of alcohol, mineral salt and tobacco are important etiological factors in GIT tumors. Proper education, awareness may decrease the incidence in both tribal as well as non-tribal population and improve the standards of living.

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