

Head and Neck Cancers: Common Indian Cancer

Manigreeva Krishnatreya*

Department of Cancer Epidemiology and Biostatistics, Dr.B Borooah Cancer Institute, Guwahati

Keywords: Head and neck cancer; Oral cancer; Causation; *Human Papilloma Virus*

Head and neck cancer is one of the leading causes of death and disability in India. Head and neck cancer comprises of cancers of the lip, tongue, oral cavity, and throat. Of all head and neck cancers, oral cancer is the most common in the country and it is the primary cause of cancer related deaths in Indian men. Every year, nearly 100,000 cases of mouth cancers are diagnosed, out of which 50% die within 12 months of diagnosis. Throat cancer (pharynx and larynx) is the next common head and neck cancer in terms of prevalence. As per estimates from the National Cancer Registry Programme under the Indian Council of Medical Research, India is witnessing an increase in the incidence of head and neck cancers. Indeed, they are among the top cancers affecting men and are the third most common cancers affecting women. Since 9% of these tumors are related to tobacco, alcohol and areca-nut usage, head and neck cancers are considered as preventable cancers.

The actual burden of head and neck cancer in India is much greater than reflected through the existing literature and hence can be regarded as a 'tip of iceberg' situation [1]. In India, the distribution of population-based cancer registries is grossly uneven with major parts of the country being not represented and hence the current cancer burden is not fully reflected by present population based cancer registry data. Head and neck cancer in India has distinct demographic profile, risks factors, food habits, family and personal history [2]. At the population level, around 30 in 100,000 and 10 in 100,000 men and women, respectively will be afflicted with head and neck cancer each year [3]. In India, head and neck cancers are a major problem constituting approximately 20-30% of all cancer cases, which is in contrast to 4-5% in the developed world. However, the irony is, the management of these cancers is mostly if not all is dictated by treatment guidelines that has evolved from the developed countries. Although very recently, researchers from India have published a practice changing paper and challenged the existing dogma in the management of oral cancers [4].

The major risk factor for the causation of head and neck cancers is the use of tobacco in any form. It has been seen that decreasing use of tobacco over the last few decades in the developed world has resulted in a decline in the incidence of tobacco-related head and neck cancers in those

countries. But, in India due to rampant prevalence of tobacco use, the incidences of head and neck cancers are rising each year. There have been some attempts by the government to decrease the use of tobacco and as per the latest Global Adult Tobacco Survey there has been a slight decline in the tobacco consumption in the country as a whole [5]. However, given the magnitude of the problem there is much more that needs to be done to significantly impact on reduction in the incidence of head and neck cancers in the country. More recently, Human Papilloma Virus (HPV) has been implicated in the causation of head and neck cancers. Here again the vast majority of data is from the western countries. Parallel to this decrease in the incidence of tobacco-related cancers in developed countries, there has been an increase in human HPV related cancer. However, this changing epidemiology is not seen in India, despite literature suggesting that up to 40% coexisting prevalence of HPV is seen in head and neck cancers from the country. Areca nut chewing is another risk factor for head and neck cancers in India. Areca nut chewing is a customary habit in many parts of the country and it is believed to be the leading cause of oral cancers in women [6]. The current focus of oral cancer prevention in India is on avoidance of chewable tobacco like *gutkha*, *zarda*, *khaini* etc. by mass media and other forms of awareness creation among the public. However, areca nut consumption is not focused as one of the potentially preventable risk factor for the causation of oral cancer especially among women of the country.

In India, majority of cancers present at advanced stage disease. While most of the current efforts focus on the treatment and outcomes following treatment, the need for early detection simply cannot be overlooked. An earlier study from India has demonstrated the proven benefit of population-based screening for oral cancers [7]. Oral cancer and potentially malignant lesions of the oral cavity can be easily diagnosed due to its anatomical location. The benefit of oral cancer screening is reduction in the number of deaths in high risk population and this can be done by simply training health workers without the need of sophisticated equipments, or even doctors. Although it will be very difficult to implement population-based cancer screening of oral cavity at a national level with existing resources, but it is worthwhile to carry out opportunistic screening among high-risk individuals or mouth self-examination is an even more cost-effective alternative. A pilot study has shown that majority of patients reported late due to lack of awareness about the disease [8].

Head and neck cancer control will require pro-active response from the policy makers, Non-Government Organizations, health care professions, researchers, and from the industry. By the means of collective efforts, the burden of head and neck cancer in our population can be reduced substantially.

Received date: 22 Aug 2017; **Accepted date:** 12 Sep 2017; **Published date:** 19 Sep 2017.

***Corresponding Author:** Manigreeva Krishnatreya, Department of Cancer Epidemiology and Biostatistics, Dr. Bhubaneswar Borooah Cancer Institute, Guwahati, India, **E-mail:** mani_greeva@yahoo.co.in

Citation: Krishnatreya M (2017) Head and Neck Cancers: Common Indian Cancer. J Cancer Ther Sci. 1(1)

Copyright: © 2017 Krishnatreya M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

References

1. Mishra A, Meherotra R (2014) Head and neck cancer: global burden and regional trends in India. *Asian Pac J Cancer Prev* 15: 537-550.
2. Mishra A, Singh VP, Verma V (2009) Environmental effects on head and neck cancer in India. *J Clin Oncol* 27(suppl): 17059.
3. Consolidated Report of Population Based Cancer Registries (2012-2014) National Cancer Registry Programme, The Indian Council of Medical Research, Bengaluru.
4. D'Cruz AK, Vaish R, Kapre N, Dandekar M, Gupta S, et al. (2015) Elective versus therapeutic neck dissection in node-negative oral cancer. *N Engl J Med* 373: 521-529.
5. Global Adult Tobacco Survey (2016-17) World Health Organization.
6. Muttagi SS, Chaturvedi P, Gaikwad R, Singh B, Pawar P (2012) Head and neck squamous cell carcinoma in chronic areca nut chewing Indian women: Case series and review of literature. *Indian J Med Paediatr Oncol* 33: 32-35.
7. Sankaranarayanan R, Ramadas K, Thomas G, Muwonge R, Thara S, et al (2005) Effect of screening on oral cancer mortality in Kerala, India: a cluster-randomised controlled trial. *Lancet* 365:1927-1933.
8. Baishya N, Das AK, Krishnatreya M, Das A, Das K, et al (2015) A pilot study on factors associated with presentation delay in patients affected with head and neck cancers. *Asian Pac J Cancer Prev* 16: 4715-4718.