

A clinical study of 150 cases of head neck cancer patients to identified the incidence of different site of head neck malignancy

Jitendra Nagar^{1*}, Ashok Kumar Nagar²

{¹Senior Resident, Department of ENT} {²District Cancer Nodal Officer, Department of Oncology} Jhalawar Medical College, Jhalawar, INDIA.

Email: drjitunagar@gmail.com

Abstract

Background: Now a days incidence of head and neck malignancy is very common in India due to excessive use of tobacco, betal nut, paan, supari, chewing. excessive use of alcohol. most of head neck malignancy include malignancy buccal mucosa/tongue, alveolus, floor of mouth, palate, tonsils, valleculla, larynx, laryngopharynx, nasal cavity, paranasal sinus, gums, nasopharynx, salivary gland. squamous cell cancer is the common malignancy. in our study we recorded 150 cases of head neck malignancy out of 615 total malignancy. tobacco snuffing also big cause of nasal cavity and pns malignancy. **Aims and Objectives:** To see the incidence of head and neck malignancy in whole body malignancy. To see the incidence of different site of malignancy in head and neck region. **Material and Methods.** All the cases are presented in our OPD department. and primary diagnosed by presenting symptoms like nonhealing ulcer, throat pain, dysphagia, swelling, change in voice, nasal obstruction, epistaxis, after symptomatic diagnosis we performed biopsy for histopathological examination and supportive investigation are FNAC, CECT, MRI, pet scan and identified the accurate stage of disease and plan.

Key Word: head neck malignancy.

*Address for Correspondence:

Dr Jitendra Nagar, Senior Resident, Department of ENT, Jhalawar Medical College, Jhalawar, INDIA.

Email: drjitunagar@gmail.com

Received Date: 04/12/2019 Revised Date: 14/01/2020 Accepted Date: 03/02/2020

DOI: <https://doi.org/10.26611/10161431>

Access this article online

Quick Response Code:	Website: www.medpulse.in
	Accessed Date: 02 June 2020

INTRODUCTION

Cancers of head and neck, usually begin in the squamous cells that line the moist, mucosal surfaces of head and neck (for example, inside the mouth, the nose, and the throat). These squamous cell cancers are often referred to as squamous cell carcinomas of the head and neck. Head and neck cancers can also begin in the salivary glands, but salivary gland cancers are relatively uncommon. Salivary glands contain many different types of cells that can become cancerous, so there are many different types of salivary gland cancer.

MATERIAL AND METHOD

The present study was done on patients who visited the out patients department of otorhinolaryngology and oncology of SRG hospital Jhalawar. The study was carried out of 200 patients of head and neck cancer of different age and sex group. Patient identified in OPD by typical medical history. clinical examination. naked eye appearance of the lesion. if any confusion than took tissue [by punch biopsy, d/l biopsy, endoscopic biopsy] for histopathological examination. sometime FNAC also helpful, [neck swelling, salivary gland swelling, thyroid swelling, if the biopsy is positive we identified the staging and planed for treatment.

The method of study was carried our under the following headings

History taking, Clinical examination, Biopsy [punch,d/l,endoscopic], Staging system, Investigation, Operative procedure[if operable], Postoperative care, Chemoradiation, Follow up.

OBSERVATION

Table 1: To see the incidence of head neck malignancy in whole body malignancy.

Total case[registered]	No.of head neck cancer	Percentage[%]
615	150	24.39

Table 2: To see the Age wise distribution of head neck malignancy

AGE[Years]	NO OF PATIENTS	PERCENTAGE[%]
0-20	0	0%
21-40	44	29.34%
41-60	65	43.33%
61-80	37	24.66%
>81	4	2.6%
Total	150	100%

Table 3: To see the sex wise distribution of head neck malignancy

SEX	NO OF PATIENTS	PERCENTAGE[%]
MALE	126	84%
FEMALE	24	16%
TOTAL	150	100%

Table 4: To see the site wise distribution of head and neck malignancy

SITE	NO OF PATIENTS	PERCENTAGE[%]
Buccal Mucosa	57	38%
Tongue	43	28.6%
Lip[lower]	3	2%
Alveolus[mandible]	3	2%
Floor of Mouth	2	1.33%
Retromolar trigone	2	1.33%
CA Tonsils	4	2.6%
CA Neck,cervical LN.	5	3.33%
CA Thyroid	4	2.6%
CA Hard palate	2	1.33%
CA Soft palate	3	2%
CA Larynx,laryngopharynx	12	8%
CA Valleculla	2	1.33%
CA parotid gland	2	1.33%
CA submandibular gland	1	0.6%
CA Maxilla	2	1.33%
CA Nasopharynx	1	0.6%
BCC	1	0.6%
Nasal cavity	1	0.6%

DISCUSSION

The present study was conducted on 150 cases of head and neck malignancy in department of Ent Jhalawar Medical college Jhalawar. The 1st table shows the total incidence of head and neck malignancy were 24.39% in whole malignancy. In table 2nd shows that the maximum incidence of head neck malignancy were in the age group 41-60 year [43.33%] followed by 21-40[29.34%] than 61 - 80year [24.66%], and only 2.6% case are reported above 80 year of age. minimum age reported 22 year male suffering from CA buccal mucosa. maximum age group reported 87 year female [CA hard palate]. The table 3rd shows sex wise distribution of head and neck

malignancy.in our study 84% was male and in 16% was female case reported. The table 4th shows site wise distribution of cases. In our study buccal mucosa is the commonest site that was 38%, than second commonest site was tongue 28.65% .than larynx 8 %, than CA neck 3.33% than CA tonsils, CA thyroid, was 2.6% than alveolus, lip, soft palate 2% than CA floor of mouth, retromolar trigone, hard palate, valleculla, parotid gland, maxilla was 1.33% Than nasopharynx, sub mandibular gland, BCC, nasal cavity was reported 0.6%.

SUMMARY AND CONCLUSION

150 cases of head and neck malignancy out of 615 whole body malignancy was identified in our study. The main point of interest are summarized as follow.

1. The most of the cases were found in middle age group 30-60 year of age in head and neck malignancy.
2. The male to female ratio being about 5.24:1 in head neck malignancy in our study.
3. The most cases of head and neck malignancy was tobacco chewer, smokers, sniffers and alcoholics.
4. The commonest sites of head and neck malignancy were buccal mucosa[38%] and tongue[28.6%] in our study.
5. Treatment result depends on time of diagnosis[stage], compliance and alertness of patient, age of patients. quality of surgery, chemoradiation and regular follow up.

REFERENCES

1. Mendenhall WM, Mancuso AA, Amdur RJ, *et al.*. Squamous cell carcinoma metastatic to the neck from an unknown head and neck primary site. *American Journal of Otolaryngology* 2001; 22(4):281–287.
2. Gandini S, Botteri E, Iodice S, *et al.*. Tobacco smoking and cancer: a meta-analysis. *International Journal of Cancer* 2008; 122(1):155–164.
3. Hashibe M, Boffetta P, Zaridze D, *et al.*. Evidence for an important role of alcohol- and aldehyde-metabolizing genes in cancers of the upper aerodigestive tract. *Cancer Epidemiology, Biomarkers and Prevention* 2006; 15(4):696–703.
4. Hashibe M, Brennan P, Benhamou S, *et al.*. Alcohol drinking in never users of tobacco, cigarette smoking in never drinkers, and the risk of head and neck cancer: pooled analysis in the International Head and Neck Cancer Epidemiology Consortium. *Journal of the National Cancer Institute* 2007; 99(10):777–789.
5. Boffetta P, Hecht S, Gray N, Gupta P, Straif K. Smokeless tobacco and cancer. *The Lancet Oncology* 2008; 9(7):667–675.
6. Blot WJ, McLaughlin JK, Winn DM, *et al.*. Smoking and drinking in relation to oral and pharyngeal cancer. *Cancer Research* 1988; 48(11):3282–3287.
7. Tuyns AJ, Estève J, Raymond L, *et al.*. Cancer of the larynx/hypopharynx, tobacco and alcohol: IARC international case-control study in Turin and Varese (Italy), Zaragoza and Navarra (Spain), Geneva (Switzerland) and Calvados (France). *International Journal of Cancer* 1988; 41(4):483–491.
8. Hashibe M, Brennan P, Chuang SC, *et al.*. Interaction between tobacco and alcohol use and the risk of head and neck cancer: pooled analysis in the International Head and Neck Cancer Epidemiology Consortium. *Cancer Epidemiology, Biomarkers and Prevention* 2009; 18(2):541–550.
9. Chaturvedi AK, Engels EA, Pfeiffer RM, *et al.*. Human papillomavirus and rising oropharyngeal cancer incidence in the United States. *Journal of Clinical Oncology* 2011; 29(32):4294–4301.
10. Adelstein DJ, Ridge JA, Gillison ML, *et al.*. Head and neck squamous cell cancer and the human papillomavirus: summary of a National Cancer Institute State of the Science Meeting, November 9–10, 2008, Washington, D.C. *Head and Neck* 2009; 31(11):1393–1422.
11. Gillison ML, D'Souza G, Westra W, *et al.*. Distinct risk factors profiles for human papillomavirus type 16-positive and human papillomavirus type-16 negative head and neck cancers. *Journal of the National Cancer Institute* 2008; 100(6):407–420.
12. Ho PS, Ko YC, Yang YH, Shieh TY, Tsai CC. The incidence of oropharyngeal cancer in Taiwan: an endemic betel quid chewing area. *Journal of Oral Pathology and Medicine* 2002; 31(4):213–219.
13. Goldenberg D, Lee J, Koch WM, *et al.*. Habitual risk factors for head and neck cancer. *Otolaryngology and Head and Neck Surgery* 2004; 131(6):986–993.
14. Yu MC, Yuan JM. Nasopharyngeal Cancer. In: Schottenfeld D, Fraumeni JF Jr., editors. *Cancer Epidemiology and Prevention*. 3rd ed. New York: Oxford University Press, 2006.
15. Yu MC, Yuan JM. Epidemiology of nasopharyngeal carcinoma. *Seminars in Cancer Biology* 2002; 12(6):421–429.
16. Mayne ST, Morse DE, Winn DM. Cancers of the Oral Cavity and Pharynx. In: Schottenfeld D, Fraumeni JF Jr., editors. *Cancer Epidemiology and Prevention*. 3rd ed. New York: Oxford University Press, 2006.
17. Guha N, Boffetta P, Wunsch Filho V, *et al.*. Oral health and risk of squamous cell carcinoma of the head and neck and esophagus: results of two multicentric case-control studies. *American Journal of Epidemiology* 2007; 166(10):1159–1173.
18. Olshan AF. Cancer of the Larynx. In: Schottenfeld D, Fraumeni JF Jr., editors. *Cancer Epidemiology and Prevention*. 3rd ed. New York: Oxford University Press, 2006.
19. Boffetta P, Richiardi L, Berrino F, *et al.*. Occupation and larynx and hypopharynx cancer: an international case-control study in France, Italy, Spain, and Switzerland. *Cancer Causes and Control* 2003; 14(3):203–212.
20. Littman AJ, Vaughan TL. Cancers of the Nasal Cavity and Paranasal Sinuses. In: Schottenfeld D, Fraumeni JF Jr., editors. *Cancer Epidemiology and Prevention*. 3rd ed. New York: Oxford University Press, 2006.
21. Luce D, Leclerc A, Bégin D, *et al.*. Sinonasal cancer and occupational exposures: a pooled analysis of 12 case-control studies. *Cancer Causes and Control* 2002; 13(2):147–157.
22. Luce D, Gérin M, Leclerc A, *et al.*. Sinonasal cancer and occupational exposure to formaldehyde and other substances. *International Journal of Cancer* 1993; 53(2):224–231.
23. Preston-Martin S, Thomas DC, White SC, Cohen D. Prior exposure to medical and dental x-rays related to tumors of the parotid gland. *Journal of the National Cancer Institute* 1988; 80(12):943–949.

24. Horn-Ross PL, Ljung BM, Morrow M. Environmental factors and the risk of salivary gland cancer. *Epidemiology* 1997; 8(4):414–429.
25. Chien YC, Chen JY, Liu MY, *et al.*. Serologic markers of Epstein-Barr virus infection and nasopharyngeal carcinoma in Taiwanese men. *New England Journal of Medicine* 2001; 345(26):1877–1882.
26. Hamilton-Dutoit SJ, Therkildsen MH, Neilsen NH, *et al.*. Undifferentiated carcinoma of the salivary gland in Greenlandic Eskimos: demonstration of Epstein-Barr virus DNA by in situ nucleic acid hybridization. *Human Pathology* 1991; 22(8):811–815.
27. Chan JK, Yip TT, Tsang WY, *et al.*. Specific association of Epstein-Barr virus with lymphoepithelial carcinoma among tumors and tumorlike lesions of the salivary gland. *Archives of Pathology and Laboratory Medicine* 1994; 118(10):994–997.
28. Siegel RL, Miller KD, Jemal A. *Cancer Statistics, 2017*. *CA: A Cancer Journal for Clinicians* 2017; 67(1):7–30.
29. American Cancer Society (2017). *Cancer Facts and Figures 2017* Exit Disclaimer. Atlanta, GA: American Cancer Society. Retrieved March 29, 2017.
30. Do KA, Johnson MM, Doherty DA, *et al.*. Second primary tumors in patients with upper aerodigestive tract cancers: joint effects of smoking and alcohol (United States). *Cancer Causes and Control* 2003; 14(2):131–138.
31. Argiris A, Brockstein BE, Haraf DJ, *et al.*. Competing causes of death and second primary tumors in patients with locoregionally advanced head and neck cancer treated with chemoradiotherapy. *Clinical Cancer Research* 2004; 10(6):1956–1962.
32. Chuang SC, Scelo G, Tonita JM, *et al.*. Risk of second primary cancer among patients with head and neck cancers: a pooled analysis of 13 cancer registries. *International Journal of Cancer* 2008; 123(10):2390–2396.

Source of Support: None Declared
Conflict of Interest: None Declared

