doi: 10.5958/0976-156X.2014.00027.6

# PREVENTION AND CONTROL OF ORALCANCER: KEY ROLE OF DENTAL SURGEON

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**ABSTRACT:** Oral cancer is one of the deadliest cancer. The incidence of this cancer is increasing every year, conversely this cancer is curable and even it is totally preventable. This paper reviews the preventive aspects of oral cancer.

KEYWORDS: oral cancer, preventaion, curable

### INTRODUCTION

It is estimated that in 2002 there were 274,000 new cases of oral cancer and 145,000 death due to these diseases globally, out of which 85,000 new cases and 46,000 deaths occurred in India. Oral cancer is a preventable cancer. If detected early and managed properly, it is curable, excellent pain relief and palliative care can be given to the terminally ill.

But the Pardox is that even today, thousands in India develop oral cancer and majority of them die miserably of these disease. It is high time for the dental profession in general and the specialty of oral medicine and radiology in particular to review what they can offer for the prevention and control of oral cancer in India

Primary prevention is the most cost effective method to fight oral cancer. The etiological factors for oral cancer are well identified. The most important are habitual consumption of tobacco, arecanut and alcohol. The strategies for the control of these substances are (1) creation of awareness of their hazards,(2)legislation to restrict the product and sale(3)advocacy activities to make their consumption an unaccepted social practice. The dental surgeons can act on all these three areas on an individual basis when an arecanut/ tobacco/alcohol habitué is identified during oral examination, that person should make aware about the hazards of the addiction. If needed, assistance may be given to quit the habit. Dentists should join hands with governmental programmes and NGOs activities for tobacco control. The members of the Indian dental association are now collectively taking up oral cancer control and tobacco control activities. The oral medicine specialist should take up the leadership in such programme

Chemoprevention is useful in oral cancer. However it is expensive. vit.A, synthetic retinoids, caratinoids, vit  ${\sf C}$ ,

vit E, selenium,s pirulina, lycopin etc., are reported to have varying degrees of protective effects. As there is need for prolonged treatment, poor patients find difficult to pursue full course .therefore more than a prescription type of treatment, a proscripition type of management banning/ tobacco/alcohol with dietary modulation to use daily green and yellow vegetables and fruits, will be more feasible goal of chemoprevention for developing countries

Oral cancer has a long natural history of development. Majority of oral cancers arise from pre-existing precancerous states. So the best strategy of early detection will be the detection of oral pre cancers. It will be considered as negligence if precancer is missed or a patient with precancer is not informed about the importance and given proper treatment. The past experience shows that dentist, doctors, health workers, volunteers ,with high school education and even patients can be trained to identify oral cancer and pre cancer. Now there is clear evidence that oral visual inspection followed by prompt treatment will significantly reduce oral cancer mortality.

Cases of precancers showing clinical signs of malignant transformation and clinically frank malignancies should be biopsied. When a case is histopathologically confirmed, that patient to referred to an appropriate oral cancer treatment centre without losing the valuable time

Dental surgeon is a member of oral cancer management team in all modern centers. Patients considered for radiation should undergo preoperative procedures like extraction of badly decayed teeth endodontic and conservative procedures, improvement of oral hygiene and fluoride application, prior to radiation. The dentist can make bite blocks, protective shields, and positioning device to direct the radiation beam. They can

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also make moulds for positioning radioactive needles and place polythene catheters for after loading brachytherapy during radiation, patient should be monitored and treated to prevent /reduce complications of radiation .prosthetic rehabilitation is another area where dentist can improve the quality of life of a surgically managed patient.

Survival analysis shows that about 70% of the patients diagnosed with oral cancer will die of the disease within 5 years. They suffer from severe pain, bad smell, fungating ulcers, bleeding, dysphagia, dysphonia, and depression. Radiation oncologist have very little time to listen to, examine and treat patients in terminal stages. Many of such patients living in their homes in villages and small towns cannot report for follow up visits due to economic constraints. Among all specialists in medical profession the dental surgeon is the best option to treat such patients with short training dentists can give neurolytic blocks, manage dysphagia, dyspnea, bleeding and treat pain and other distressing symptoms very effectively. Modification should include trainings of PG s for a month in regional cancer centers or medical colleges in oral cancer control activities. As the curriculum revision will take time the concerned professors' may intimate such changes straight away. The directors of regional cancer centers and the Director of Medical Education of the state are requested to conduct regular in service training programmers' for working dentists in primary prevention, early detection and palliative care.

With about 300 dental colleges, over 80 of them offering post graduate training now in the country, a huge man power of qualified dentist will be available in the near future. A realistic action plan involving the dentists in various aspects of oral cancer prevention and control can drastically improve the quality of life of oral cancer patients and considerably reduces the morbidity and mortality from oral cancer.

#### References

- Forlay.J,Parking DM,Pissani P,Goboscan 2002:cancer incidence mortality and prevention world wide, Lyon;IARC . Publication 2007
- Parking DM, Whelan DL, Feralay J,et al(Eds) Cancer incidence in five continents. Lyon;IARC. Publication 2007.
- Mathew B, Role of Dentist in the prevention and control oc oral cancer Jacob Zachariah Memorial Oration, Kerala Dental Journal, 1993.
- Mathew B, Sankarnarayanan R,Stich H.F et al, chemoprevention of Oral precancerous lesions in tobacco users. Chemoprevention of cancer,Bhides S.V and Maru G.B (Eds)Omega Scientific Publishers.
- Mathew B, Sankarnarayanan R,Sunil kumar K.B et al. Reproductability and validity of Oral visual inspection by trained health workers in the detection of Oral Precancer and Cancer . Br J. Cancer, 1997,76:390-94 <a href="http://dx.doi.org/10.1038/bjc.1997.396">http://dx.doi.org/10.1038/bjc.1997.396</a>
- Mathew B, Sankarnarayanan R, Wesley et al. Evaluation of mouth self examination in the control of Oral Cancer Br.J.Cancer, 1995;71:397-99 <a href="http://dx.doi.org/10.1038/bjc.1995.81">http://dx.doi.org/10.1038/bjc.1995.81</a>

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