



Updates on ORAL CANCER

**A Bulletin for
Prevention and Control of Oral Cancer
and Appropriate Tertiary Care for
Higher Prognostic Importance**

Quarterly bulletin on Oral Cancer- jointly Published by Nitte University Department of Oral Biology & Genomic Studies, India and Nara Medical University Maxillofacial Surgery & Molecular Pathology, Japan, in association with International Centre for Tropical Oral Health, England and Institute of Health Promotion & Education, UK

This Bulletin focuses on Chewing-Quid Associated Oral Cancer and Pre-Cancer

Guest Editorial

Professor Saman Warnakulasuriya, King's College London Dental Institute

In this Issue

- **Guest Editorial:** Professor Saman Warnakulasuriya, Director, WHO Collaborating Centre on Oral Cancer, London, UK
- **Message** from Professor K Hiramatsu, Director London JSPS
- **WHO perspective on Oral Cancer Prevention:** A comment by the Editor: India's Role on Prevention

Regular features

- Case of the Month
- Highlights from Published Researches
- Clinical Practice Updates
- News & Views
- Action –based Initiative
- Patients' forum: Oral Cancer Support/Survivors
- Discussion Forum/Podcas

It gives me great pleasure to send a Guest Editorial to the first volume of the Bulletin on Oral Cancer jointly published by Nitte University Department of Oral Biology & Genomic studies India and Nara Medical University Maxillofacial Surgery & Molecular Pathology, Japan.

We currently have a good understanding of the major risk factors for oral cancer which largely is a self-induced disease. Based on epidemiological, clinical and laboratory research – data well collated in several monographs published by the International Agency for Research on Cancer- known risk factors for oral squamous cell carcinoma and precursor lesions of the oral cavity are smoking, use of smokeless tobacco and alcohol misuse. In specific regions of the world, particularly in some Asian-Pacific countries, the chewing of betel quid is an additional significant risk factor. Areca nut, the main ingredient used in betel quid was classified in 2004 as a class1 carcinogen (1). Human papillomavirus (HPV) infection is an emerging risk factor for oropharyngeal carcinomas. The knowledge of these risk factors allows us to identify individuals who may have an increased risk of oral cancer. Global inequalities to some way contribute to risky life styles predisposing to cancer (2).

This Bulletin through its informative network will take steps to inform oral healthcare professionals about effective methods for reducing harm from these etiological agents, and about care pathways to reduce the burden of oral cancer by engaging in public health programs or clinical interventions. These interventions should mostly be targeted at the high-risk groups who present in primary care settings with oral potentially malignant disorders (3). The bulletin will through future articles stimulate a debate on effective preventive measures in clinical practice. A recent review includes an overview of both public health measures and targeted measures that could be undertaken in dental offices by oral healthcare professionals and that may lead to control of oral cancer by effectively managing patients with established risk factors and potentially malignant disorders (precursor lesions) (4). The methods of prevention or interventions discussed include cessation of tobacco use, moderation of alcohol use, stopping betel quid use, vaccination against HPV viruses, dietary intervention, and chemoprevention as well as tertiary prevention measures e.g. surgery to prevent malignant transformation.

Screening for oral cancer has been researched in the Region and several Indian and Sri Lankan studies are quoted in the literature. The effectiveness is debated (5). This Bulletin I hope will contribute to this Screening debate in forthcoming issues.

The Bulletin is published from a good stable based at Nitte and Nara Universities and I am sure will flourish under the Direction of its Editor Professor Chitta Chowdhury

With very Best Wishes

Professor Saman Warnakulasuriya
London, UK
25-01-2012

References:

1. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Vol 85: Betel Quid Chewing and Some Areca-nut derived Nitrosamines. International Agency for Research on Cancer, Lyon, France: 2004
2. Johnson NW, Warnakulasuriya S, Gupta PC et al. Global inequalities in incidence and outcomes for oral cancer: Causes and solutions. *Advances in Dental Research* 2011 23; 237-246
3. Warnakulasuriya S, Johnson NW, van der Waal I. Nomenclature and classification of potentially malignant disorders of the oral mucosa. *J Oral Pathol Med* 2007; 36; 575-580
4. Warnakulasuriya S. Squamous cell carcinoma and precursor lesion: Prevention. *Periodontol* 2000, 2011; 57(1):38-50.
5. Warnakulasuriya S and Cain N. Screening for oral cancer: Contributing to the debate. *J Inv Clin Dentistry* 2011; 2 : 2-9



MESSAGE

**Professor K Hiramatsu,
Director - London JSPS**

It is my great pleasure to extend our strategic support on prevention and control of mouth cancer which has the highest death toll in Asia annually. Japan Society for the Promotion of Science has been keeping very active in supporting research and academic innovations with cutting edge technologies and advanced practices in various fields of science in the world. Mouth cancer research is one of these areas in which UK-JSPS Alumnus Professor Chitta Choudhury is involved in. He has recently finished a good research project with JSPS support last year with colleagues at Nara Medical University. On his return to the UK, we very much appreciated the time Professor Choudhury took to visit our office to report on his work in Japan and the grave situation of mouth cancer in Asia. Through Professor Choudhury's work we can understand the very real details of this deadly disease, which it is important to understand is preventable if detected at an earlier stage. We also understand that a poor life-style is one of the major contributing factors for development of oral cancer and that chewing tobacco has become the number one cause of mouth cancer as a by-product of this. As a distinguished UK-JSPS Alumnus, Professor Choudhury is doing an extraordinary job which is evident in publications and ongoing action-based programmes, to spread awareness on prevention and cure of oral cancer. We are very happy to support the initiative taken by him and his team to develop a strategic goal and long-term action programme to help reduce cases of mouth cancer in Asia. I am sure the upcoming bulletin and seminar meeting is the right course of action to take to move this initiative forward. We give our full strategic support to this and wish Professor Choudhury as a UK- JSPS Alumnus every success in his research and action-based programme.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'K. Hiramatsu', written over a horizontal line.

Professor Kozo Hiramatsu
Director, JSPS London

WHO perspective on Oral Cancer Prevention

"The participants of the 10th International Congress on Oral Cancer which took place on 19-24 April 2005 in Crete, Greece, welcomed the initiative to analyse the evidence on oral cancer and the implications for prevention and public health programmes. The participants from 57 countries expressed concern about the neglected burden of oral cancer which particularly affects developing countries with low availability of prevention programmes and services for oral health.

The participants support the efforts of the WHO Oral Health Programme aiming at coordination and inter-country sharing of experiences in prevention and oral health care of people affected by oral cancer.

The Oral Health Programme will be involved in

- **Prevalence Study:** Providing systematic epidemiological information on prevalence of oral cancer
- **Research on Cancer Biology:** Research on understanding biological, behavioural and psychosocial factors in oral cancer.
- **Surveillance System:** Integrating oral cancer information into national health surveillance systems
- **Information Exchange:** Dissemination of information on oral cancer, and clearinghouse service
- **Oral Health Professionals help prevent Oral Cancer:** Active involvement of oral health professionals in oral cancer prevention
- **Training for Primary Health Care (PHC) workers**
- **Early Intervention:** Early detection and intervention, oral health care and health promotion

The WHO Global Oral Health Programme is committed to work for country capacity building in oral cancer prevention, inter-country exchange of information and experiences from integrated approaches in prevention and health promotion, and the development of global surveillance systems for oral cancer and risk factors.

Epidemiological data on oral cancer incidence and mortality are stored in the Global Oral Health Data Bank. In 2007, the World Health Assembly (WHA) passed a resolution on oral

health for the first time in 25 years, which also considers oral cancer prevention. The resolution WHA60 A16 urges member states to take steps to ensure that prevention of oral cancer is an integral part of national cancer-control programmes, and to involve oral-health professionals or primary health care personnel with relevant training in oral health in detection, early diagnosis and treatment".

Extracted

Reference:

Petersen PE, Oral cancer prevention and control – The approach of the World Oral Oncology, doi:10.1016/j.oraloncology.2008.05.023

Editors Note:

Is there an oral cancer prevention strategy in India?

What is known: More than two decades ago extensive epidemiological studies were carried out by the TIFR Group (Headed by Dr Fali S. Mehta) along with a 10 year follow up study reported by P.C. Gupta, describing the incidence and malignant transformation of oral precancerous lesions in rural populations. The Trivandrum Group (TOCS Study) subsequently with IARC funding carried out a screening study that showed the clinical effectiveness of oral cancer screening, particularly among male tobacco users.

The question should be asked: Have these research findings been translated to routine care and what are the barriers faced during implementation. Are we implementing the WHO Framework Convention for Tobacco Control (FCTC)? Has the above referenced WHA60 A16 been incorporated to the national oral cancer prevention strategy of India.

It appears that a strategy for oral cancer prevention and control is almost absent in India. The country does not have a clear-cut policy on this. A strategy always depends on a policy. As there is no policy, the strategy cannot work. Therefore, in India we are not in a position to help control the million pre-mature deaths from oral cancer today.

Although India has number of regional cancer centres across the country, the actions for prevention and control is not in perspective with the above WHO guideline.

Although in India we have the highest number of oral cancer cases— and in some states it exceeds 30% of all cancers- and a cause of high death toll annually, we are helpless to help, because, we do not have good policy to tackle them effectively.

Some countries in the region have reported declining trends in oral cancer. This is largely attributable to their NCCPs having policies on oral cancer control and regulation of tobacco use. In India we need to examine oral cancer statistics to observe current trends.

For rising incidence of oral cancer a key issues remain use of Gutka and pan masala that has been popular among

young people. A while ago a ban on the sale of these products was enacted in Maharashtra followed by other Indian states. This was not implemented due to injunctions in High Court. Its time India looked at the Health Policy related to these carcinogenic products likely to induce oral cancer in young people.

These are strong words but India needs to respond to control the misery from oral cancer.

Professor Chitta Chowdhury
Editor

CASE OF THE MONTH

A case of Oral Squamous Cell Carcinoma (OSCC) in Lower Lip had postoperative Hypertension.

Arpit Binda¹ and SM Sharma²

A 75 year old male patient presented with a chief complaint of growth over his lower lip, that he was suffering from last 6 months (Fig. 1a & 1b). The case was referred to the department of oral and maxillofacial surgery of A.B. Shetty Memorial Institute of Dental Sciences of Nitte University.

As per the patient's description, the growth had started as an ulcer, approximately 1 cm in size. The growth was rapidly growing and reached to the size 4x2cm over a period of six months. Patient visited a doctor (general practitioner), the practitioner prescribed some medication, but the details of the medication was not known. He was referred by his doctor to us. On presentation, the patient did not give any history of pain or discharge from the growth. Informed consent was taken, necessary examination of his general health condition was assessed and investigatory measures were performed before taking an incisional biopsy. The incisional biopsy was performed and diagnosis was made as verrucous carcinoma with initial changes of squamous cell carcinoma with micro-invasion. Patient did not have previous history of any systemic diseases. Patient had a history of personal habit of chewing-tobacco (Gutkha) and areca-nut for 30 years and also had a history of alcohol drinking for past 35 years.

On Examination: A proliferative, non-tender, firm, pedunculated lesion of 4x2 cm was noted in the region of lower labial mucosa involving the vermillion border of left side of the lip, but not involving the commissural area. He was experiencing bleeding on palpation and surface showed crusting.



Fig. 1a. Presentation of a Ca-growth in Lower Lip (left)



Fig1b. Ca- growth whilst examination

There were palpable lymph nodes at level IB and level IIA, and the largest node measured was 1.5x1.5 cm. A provisional diagnosis of squamous cell carcinoma of lip was made. TNM class was cT2N2cM0.

Investigations: Ultrasonography of the neck, and a contrast CT neck was performed to exclude any bony involvement. But ultrasonography showed the presence of bilateral submandibular node measuring 0.7 cm with intact fatty hilum. Contrast CT showed no obvious bony erosion. Also enlarged, homogenously enhancing submandibular nodes were noted bilaterally (right < left). Level II node was noted on left side.

Histopathology (Fig. 2)

Histopathological examination revealed-moderately differentiated squamous cell carcinoma with metastatic infiltrate both in supramandibular and submandibular lymph nodes. Submandibular lymph node gland was free from malignant infiltration.

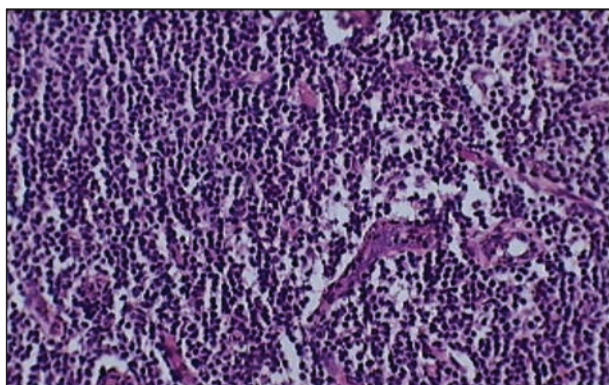


Fig. 2. Moderately differentiated OSCC

Routine investigation such as biochemical analysis and complete blood picture was found normal. The chest radiograph and ECG was normal.

Treatment: The patient was planned for surgical management.

Surgical excision of the lesion with primary closure was carried out under general anaesthesia. Supra omohyoid node dissection of his left side of neck was performed and left with a drainage. The supra mandibular lymph node was removed and sent for histopathological examination along with the excised cancer tissue. The frozen section after surgical excision of the lesion showed the surrounding tissues are free from cancer cells.

Post-operative: The condition of the patient was stable during surgery and post-operative period. After surgery, nothing was given by mouth for 6 hours and antibiotics and

analgesics were prescribed. Input and output chart was maintained. On the night of day 2 of post operation, patient showed increased blood pressure (150/100mm of Hg) which returned to normal by the following morning after couple of fluctuations. No further complication was noted. Drain was removed and alternate suture removal was performed on the 6th day after operation. The patient was discharged with oral antibiotic and analgesic. The patient was recalled after a week for removal of the suture, and followed up.

Discussion and Remark

This is one of the regular cases we routinely examine, and treat after assessment and investigations in our hospital, department of oral and maxillofacial surgery. In this case, couple of things needs to be addressed, of them - perhaps we should look into the postoperative hypertension which fluctuated over the time and got normal. Why did it occur? Is it induced by post-surgical stress or was it an incidental case of undetected/unreported hypertension? Hypertension in postoperative cases may develop reactionary bleeding, usually after 2 days of surgical procedure, may complicate the cases. Second, such cases will need to be discussed in a joint clinic. Whether this case would require pre-operative and/or post-operative radiation therapy should be addressed. The criteria set for better prognosis and the measures for effective tertiary prevention and follow-up etc. also needs to be confirmed. Moreover, whether the PET (position emission tomography) scan would be recommended to help the pathologist to see the nature and extent of the primary head and neck tumour and whether or not it has spread to the lymph nodes, lungs or liver, all these elements are needed to be taken into consideration for better tertiary care/prevention of such cases. If needed, special reconstructive surgery can help correct the defect in the lip and therefore, can be discussed.

*Reviewer

Dr Toru Nago, DDS, PhD, DMSc
Division Chief and Director
Department of Oral & Maxillofacial
Surgery & Stomatology
Okazaki City Hospital, Aichi, Japan
And
Visiting Professor

Department of Preventive Medicine
Fujita Health Science University
Graduate School of Medicine
Aichi, Japan

*In consultation with -

Professor Chitta Choudhury, Editor of
the Bulletin

Reviewer's Feedback

1.Regarding Postoperative Hypertension

Postoperative hypertension usually occurred in 3 to 25% of surgery cases (Gal TJ, Cooperman LH. Br J Anaesth et al.1995)1. Postoperative hypertension after radical neck dissection has been discussed previously. It was detected in 20.2% (Celikkanat S. et al. 1997)2 cases. The overall incidence of postoperative hypertension (blood pressure > 160/90mmHg) after radical neck dissection was 44.4% (Kato S et al. 1996)3. It was probably caused by carotid sinus denervation and appeared after the vasodilation generated by anesthesia (Celikkanat S. et al. 1997)2. Patients who undergo major oral, head and neck cancer surgery are at significant risk for postoperative hypertension. Careful pre and post operative cardiovascular monitoring is important.

2. Is postoperative radiation therapy required for this case?

It depends on the presence of lymph-vascular invasion; histological grade and mode of invasion in the pathological findings are important prognostic factor for cancer treatments. If lymph-vascular invasion is presented and/or higher histological grade/ mode of invasion are evident, then performing a postoperative chemo-radiation therapy (CRT) or radiation therapy (RT) should be considered.

3. Tertiary prevention

For better prognosis of the cancer patients, tertiary prevention is expected in all cancer cases. In this case, the patient has high risk factors; chewing tobacco and alcohol drinking for many years. He also has a poor oral hygiene as seen in Fig1b and may have a poor diet. These factors are significantly related to the prognosis of oral, head and neck cancer patients. A well designed educational intervention during this follow-up would be beneficial.

4. Is PET-CT helpful for tertiary care / prevention?

Yes, if it's available. Of course, US (ultra-sonography) and CT/MRI are important for the regular follow-up.

5. Reconstructive surgery in cancer of the lip.

Treatment of lip cancer is very difficult both cosmetically and functionally. Rotation advancement flaps are selected if the surgical defect is relatively small. Even large defects can be reconstructed by these techniques using adjacent tissues. In rare cases, forearm flap and DP-flap are indicated for very large areas of the defects.

6. Treatment

In the case of cT2N2cMo, neck dissection on the contralateral side is performed at primary surgery. If such patients have general risk factors or elderly, secondary management should be considered.

7. Others: Presentation of diagnostic images is informative, and required.

References:

1. Gal TJ, Cooperman LH. Hypertension in the immediate postoperative period. Br J Anaesth. 1975 Jan;47(1):70-4.
2. S. Celikkanat, M Umit A, Can Coc et al. Postoperative hypertension after radical neck dissection. Otolaryngology- Head and Neck Surgery. Vo. 117 Issue 1, 1997, pp 91-92.
3. Kato S, Ogawa M, Kanai A, Okutomi T. Radical Neck Dissection Increased the Incidence of Postoperative Hypertension. Kitasato Medicine 1996 26(5):262-265. ci.nii.ac.jp/naid/110004696928 (accessed on 30 Jan 2012)
1. Final year Master's of Dental Surgery (MDS) Student, Department of Oral & Maxillofacial Surgery, Nitte University AB Shetty Memorial Institute of Dental Sciences, Deralakatte, Mangalore 575 018, India
2. Professor and Head, Department of Oral & Maxillofacial Surgery, Nitte University AB Shetty Memorial Institute of Dental Sciences, Deralakatte, Mangalore 575 018, India.

HIGHLIGHTS ON CURRENT DIAGNOSTIC & PROGNOSTIC APPLICATIONS

Lab-made Tissue Picks Up the Slack of Petri Dishes in Cancer Research

E-cadherin, that can delay cancer development.

"New research demonstrates that previous models used to examine cancer may not be complex enough to accurately mimic the true cancer environment. Using oral cancer cells in a three-dimensional model of lab-made tissue that mimics the lining of the oral cavity, the researchers found that the tissue surrounding cancer cells can epigenetically mediate, or temporarily trigger the expression or suppression of a cell adhesion protein associated with the progression of cancer.

When using simplified culture systems in which cells are grown on petri-dish, cancer cells grow as a two dimensional monolayer and lack the three-dimensional tissue structure seen in human cancer. As a result, complex interactions that occur between the cancer cells and the surrounding tissue layers are not accounted for.

The researchers report that the three-dimensional network of cell interactions activates epigenetic mechanisms that control whether genes critical for cancer development will be turned on or off. By imitating the structure of the tumor microenvironment is seen in different stages of cancer, the research team was able to observe that cell-to-cell interactions, inherent in tissue structure are sufficient to turn on the cell adhesion protein (E-cadherin) that can delay cancer development.

Since both invasion and metastasis occur when cells break away from the primary cancer site, an event correlated with loss of E-cadherin, treating cancers to induce re-expression of this protein through epigenetic control may be an important way to control cancer progression.

The findings show the reversible nature of E-cadherin when cancer cells are placed in a three-dimensional network of cells that mimics the way cancer develops in our tissues. This confirms that cancer biology needs to move into the "third dimension" where cancer cells can be studied in a network of other cells that can control their behavior. We therefore now know that the petri-dish alone is not good enough."

Note: *In order to provide the exact information, this report has been extracted. We welcome any discussion on this issue.*

References:

DesRochers TM, Shamis Y, Alt-Holland A, et al. The 3D tissue microenvironment modulates DNA methylation and E-cadherin expression in squamous cell carcinoma. *Epigenetics* 2012 (January); 7 (1): 34-46.

<http://www.biosciencetechnology.com/News/2012/01/Lab-made-Tissue-Picks-Up-the-Slack-of-Petri-Dishes-in-Cancer-Research/> (accessed on 18 January 2012)

Bubble Liposomes With Ultrasound May Help Gene Therapy For Oral Cancer Tongue Could Be A Better Tissue.

"Researchers are struggling to find a good media to transfer gene for gene therapy in oral cancer cases. The optimal method for delivering therapeutic genes into oral tissue for cancer treatment has still not been elucidated. Therefore this study hypothesized that the tongue is a good target tissue for gene delivery with Bubble liposomes and ultrasound. This was assessed by attempting to deliver a

mixture of plasmid DNA encoding luciferase or enhanced green fluorescent protein, and Bubble liposomes into murine tongue with or without ultrasound exposure. The time course of gene expression in the tongue was investigated with a luciferase assay and fluorescent microscopy. Luciferase expression was significantly increased in tongue transfected using Bubble liposomes

and ultrasound compared with that of the tongue untreated with ultrasound and this high level of luciferase activity was maintained for 2 weeks. The results of this study proved that, Bubble liposomes can be used in combination with ultrasound to efficiently deliver plasmid DNA into the tongue in vivo. This technique could be a promising approach for gene delivery into oral tissue. But it will need further investigation before starting clinical trial in human.”

Note: In order to provide the exact information, this report has been extracted. We welcome a discussion on this report.

References:

Marika Sugano, Yoichi Negishi, Yoko Endo-Takacashi, et al. Gene delivery system involving Bubble liposomes and ultrasound for the efficient in vivo delivery of genes into mouse tongue tissue, International Journal of Pharmaceutics, Volume 422, Issues 1–2, 17 January 2012, Pages 332-337.
<http://www.sciencedirect.com/science/article/pii/S0378517311010374> (accessed on 18 January 2012)

HIGHLIGHTS ON CURRENT TREATMENT & MANAGEMENT

Evaluation of microscopic disease in oral tongue cancer using whole - mount Histopathologic techniques: Implications for the management of head-and-neck cancers

"A study was undertaken to map the distribution of microscopic disease (MD) in head-and-neck cancer by analyzing digital images of whole-mounted serial sections of tongue cancer specimens. Ten T1–3 oral tongue cancer specimens were evaluated. The specimens were sliced into 3-mm blocks from which one or more 4-mm slides were taken and digitized to create whole-mounted serial sections. Gross tumor and microscopic disease were digitally contoured on each slide.

Lines perpendicular to the gross tumor volume (GTV) edge were created at 0.05-mm intervals and the distance between GTV and MD measured. Of 88 slides assessed, (50%) had evidence of MD. Of the 63,809 perpendicular lines drawn along the GTV edges, (3.6%) encountered microscopic disease along their path. The majority of MD abutted the GTV, and only 26.7% was noncontiguous with the GTV edge. The maximum distance from the border was 7.8 mm. Ninety-nine percent of all MD was within 4.75 mm and 95% was within 3.95 mm of the GTV.

This study was able to assess the distribution of MD more accurately than has been possible with routine pathologic techniques. The results indicate that when the GTV is correctly identified, there is very little MD to be found outside this volume. This has implications for the volume of tissue resected at surgery and the volume included in the clinical target volume in conformal radiotherapy planning.”

Note: In order to provide the exact information, this report has been extracted. We welcome a discussion on this report

References:

Sorcha Campbell, Ian Poon, Dan Markel, Dan Vena, et al. Evaluation of Microscopic Disease in Oral Tongue Cancer Using Whole-Mount Histopathologic Techniques: Implications for the Management of Head-and-Neck Cancers, International Journal of Radiation Oncology, Biology, Physics, Volume 82, Issue 2, Pages 574-581, 1 February 2012.
<http://www.sciencedirect.com/science/article/pii/S036030161003347X> (accessed on 18 Jan 2012)

PATIENTS' FORUM: ORAL CANCER SUPPORT & SURVIVORS

This important section entails the - Questions from the patients | Rehabilitation of oral cancer patients | Advise regarding timely reporting and treatment detail | Inspire the patients' to volunteer for cancer research (without risking their disease condition and with informed consent). This section is a platform interface between a patient and doctor. A patient can ask questions to his/her doctor online. From next issue we will provide a thread/link.

This forum is also to gather the patients who have been dealt the hard hand of dealing with a recurrence of the disease, the unique emotional issues that accompany, and the issues related to retreatment, cancer pain, psychological distress of the patients and carer, financial burden and a rehabilitation after ablative surgery.

As a part of this section, the Oral Cancer Screening and Education Unit of Nitte University department of Oral Biology and COD-PC has come up with a booklet for the patients and carers (authored by Chitta Choudhury and his expert team) entitled by "What you

need to do when pre-cancer or cancer in your mouth cavity is suspected?" You will find this booklet helps understand the facts and fallacies of mouth cancer in a very clear and simple language. It is under progress to translate it into local language.

You will have valid answers of your questions, such as-

- How can I detect my mouth cancer at an earlier stage?
- How can I see cancer in my mouth by myself?
- How my mouth cancer is detected and confirmed by a doctor?
- How my mouth cancer will be treated?
- What are the side-effects of the treatment of mouth cancer?
- Is there any rehabilitation after surgery of mouth cavity?
- How my doctor will help stopping further appearance of mouth cancer?
- How can I get good information to prevent mouth cancer?
- How can I know more about the cause of mouth cancer?
- Who may give me further information on mouth cancer if I need for?

We shall try to give valid information on the above questions. We believe our clinicians and students will be benefitted by grasping a series of answers for their patients and carers as well.



Patients' Forum: Support/Survivors
(Courtesy: Oral Cancer Screening Unit | Oral Biology & COD-PC)



Sharing Cancer Education & Tobacco Quitting
(Courtesy: Oral Cancer Screening Unit | Oral Biology & COD-PC)



A Risk Group Subject (smoker and chewer) for Mouth Cancer is motivated with Knowledge, Attitude & Practice (KAP) model. The person is exchanging his cigarette by tomato/Carrot (natural antioxidant) from an intern doctor of the Unit (Courtesy: Oral Cancer Screening Unit | Oral Biology & COD-PC)

ACTION-PROGRAMMES

Application of combined NRT and KAP intervention :

A proposed model for Smokeless Tobacco(ST) Control and Oral Cancer Education

While using the Knowledge, Attitude and Practice (KAP) model in our Oral Cancer Screening unit of Nitte University Dental College, we find that a significant proportion of patients quitted the habit of smoking and chewing tobacco, but again a small proportion of them re-started the habit after 2-6 months of quitting. The fact is that those group of population are nicotine dependent, and they are helpless unless they receive a nicotine replacement. Therefore, we are coming up with a model that has both KAP intervention and Nicotine replacement therapy (NRT). We anticipate that, the KAP and NRT will have a complementary action on stopping the habit. National Health Service of UK (NHS) has very successful Stop tobacco clinics, but unfortunately some of the clients (smokers) are struggling to stay non-

smoking despite they are treated with NRT. I think in that situation the KAP intervention will help NRT therapy. We are now under progress to test the model through a structured treatment protocol of prescribing NRT therapeutic agent (eg. Champrix) combining KAP intervention. This will be closely monitored clinically by the expert physicians (dental and medical) and their systemic health will be assessed by using equipments, such as - CO monitor, respiratometer, lung function test, blood-pressure etc. We need to inform that the CO-monitor not only helps detect concentration of CO in smoker's breath, also %Hb affected by CO in a fetus of a mother, who smokes passively at home or work-place. It will be a good operational research for improving care services in the risk group population as well.

DISCUSSION FORUM/PODCAST

Educational and Training in Cancer Control in India:

Recent declaration from Ministry of Health, Government of India.

The morbidity and mortality rate of cancer in India is increasing rapidly. Cancer kills about 400,000 Indians annually. It is curable if it is detected at earlier stage, but unfortunately 70% of the patients visit a doctor with an advanced stage, and that is difficult to treat. The agonizing scenario is that, by 2015, the number of cancer cases may increase upto 1500,000.

A report from ministry of health says that there are about 2.8 million people suffering from cancer in India, and nearly half a million patients die each year without having proper treatment. Hence an initiative has been taken by the National Programme for Prevention and Control of Cancer. If it is properly implemented, we hope it would provide a kind of service through the trained manpower across 21 states, as reported in the press. The ministry declared that 65 tertiary cancer centers will be established to carry out screening, biopsy and treatment procedures of various cancer.

The department of health has a great concern on how the load of cancer patients will be reduced. Nevertheless, there is an initiative taken by the ministry of health, which may help treat cancer patients. In this context, as a solution, the union health ministry declared to increase the trained manpower for cancer treatment. For this, the plan is --- a Professor from among three disciplines, such as - Radiology, Medical Oncology and Surgical Oncology can take three students in order to train them for cancer treatment. Like-wise, associate professors can do one student.

In the process, the medical council of India has already sent the recommendation to the Ministry of health and expecting to have a governmental notification to start this special training programme soon. It is needless to mention that a number of cancer cases are undetected in India, and the country does not have enough doctors or resources to detect at early stage and treat them appropriately.

Therefore, such initiatives will help increase skilled manpower in the field – the number is projected to be 5000.

Editors Note

We understand that morbidity and mortality rate of cancer is very high in the country, and is on a rise. To get the rate down it is required to have a very extensive intervention under close monitoring. Of course, development of manpower is one of the measures, and that we welcome very much, but, I think, as I said—in order to get the work

done it requires a strict monitoring on how it would operate. Otherwise, hard-earned tax-payers money will be spent for a cause only, not to fix the problem, and you should be warned --- how you take the programme off the ground through a realistic approach, and that would help million of lives rightly. Such initiative should not be the part of the problem - as it will be expensive, if it goes through.

Professor Chitta Chowdhury
Editor

EVENTS AND ANNOUNCEMENTS

Events:

Workshop on NRT

Workshop-Seminar on Nicotine Replacement Therapy (NRT) will be held on 27 March 2012.

Announcement:

Opening up of NRT Clinic

Nitte University will start a Tobacco Cessation and Nicotine Replacement Therapy (NRT) Clinic at Oral Cancer Screening Unit of Department of Oral Biology, and Centre for Oral Disease Prevention & Control, AB Shetty Dental College under Nitte University, India.

Introducing New Diploma Courses

Nitte University has decided to start three new Diploma courses of one-year duration, and the Certificate course of 3-6 months duration (depending upon the number of stand-alone units a candidate will take). The courses have Accredited Prior Learning (APL) credit. A candidate wants to study in the UK, other European, USA and Linked Japanese Universities will be exempted from the units s/he studied in any of the courses below, and for which s/he needs not to pay for the APL units. The course is designed

by Professor Chitta Choudhury, Head, Department of Oral Biology and Centre for Oral Disease Prevention and Control, and who is also coordinating the International programme for Tropical Oral Health in the UK. The courses have been designed after consultation with national and international expert faculties. For further information you may visit website and contact the course director. The course will start from April 2012.

Name of the courses (By Clinical Practice & Research)

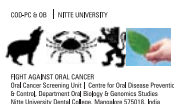
1. Advanced Oral Oncology
2. Nicotine Replacement Therapy and Tobacco Cessation
3. Advanced General Dental Practice and Clinical Dental Research

ALLIANCE FOR STOP QUID CHEWING (QC) & ORAL CANCER CONTROL FOR SE-ASIAN POPULATION

This forum will be working towards a draft Policy and formulating a strategic goal for prevention of oral cancer and control of chewing tobacco in India where load of oral cancer is much higher. Detail will be available in next issue of the bulletin.

STRATEGIC SUPPORTERS ON ORAL CANCER PREVENTION & CONTROL

Japan Society for Promotion of Science (JSPS) London
Institute of Health Promotion & Education (IHPE), UK
National Institute of Clinical Excellence (NICE), UK,-
Smokeless Tobacco (ST) Control for SE Asian Migrants
Tokyo Dental College, Japan
Nara Medical University, Japan
Osaka Dental University, Japan



Follow us on



DECLARATION

Cited reports, opinions on discussions, claims on drugs, devices and products do not necessarily comply with the opinion of editor and publisher.

Updates on ORAL CANCER

EDITORIAL COMMITTEE

Editor-in Chief

Chitta Ranjan Chowdhury

Patron Mr N. Vinay Hegde, Chancellor, Nitte University

Chief advisor Shantharam Shetty Vice Chancellor, Nitte University

Advisor Rajendra Prasad
Dean, AB Shetty Dental College

Managing Editor

Smitha Amin

Editorial Board

Anil D'Cruze, Bombay
PC Gupta, Bombay
Prasantha Sherestha, Nepal,
Saman Warnakulsuriya, London
Anthony Markus, Poole
Parkash Ramchandani, Poole
Suresh Rao, Mangalore
Andrew Lyons, London
Tadaaki Kirita, Japan
Toru Nagao, Japan
Takashi Fujibayashi, Japan
N Yamamoto, Japan
T Shibahara, Tokyo

Institutional Advisors

Sridhar Shetty
SM Sharma
MS Ravi
Subash Babu
Pushparaj
Medical Oncologist, KSHEMA

Published by

Nitte University
Health Science Campus
Deralakatte, Mangalore 575018

Contact

Chitta Ranjan Chowdhury
Professor & Head, Department of Oral Biology & Genomic Studies |
Centre for Oral Disease Prevention & Control, Nitte University AB
Shetty Memorial Institute of Dental Science, Deralakatte, Mangalore
575 018, India. Director, International Centre for Tropical Oral Health,
UK.
Email: oral.biol.cod-pc@nitte.edu.in