Views and Observation on Orofacial Cancer

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Short Communication

Cancer is a dreadful disease very distressing to the people they are scared from cancer. Orofacial cancer includes groups of malignant disease effect the oral, nasal mucosa, jaws and salivary glands and parotid and mesenchymal surrounding structures of the orofacial regions. The incidence of head neck cancer is about 8% of the total body malignancies while oral cancer in general represent about 4%, that percentage might increase to 40% in India but in US and Europe the incidence very much reduced, but in the south of Iraq the incidence very much increased because, pollution of depleted uranium been used during gulf wars.

Oncogenic viruses is a strong cause of cancer such as EBV causing Burkett’s Lymphoma and nasopharyngeal carcinoma, herpes like viruses causing Kummoona jaw lymphoma, it was noticed an association between herpetic papilloma virus (HPV virus) with oral cancer, HIV virus with AIDS disease can cause leukoplakia as pre-cancerous white lesions and end with oral cancer also Kaposi Sarcoma noticed with HIV infected cases.

The recent studies of Harvard medical school they did found strong association between advanced infection of periodontal and gum disease with incidence of oral cancer specially people with low socioeconomic group and heavy smoking, the microorganism causing infection of periodontal pockets is strepto mutant type, cancer might associated with chronic hyperplastic candidiasis in the oral tissue. There is strong association between spicy food like Chile and precancerous submucosal fibrosis, also there is a strong cause of cancer by effect of smoking with consumption of alcohol, hereditary and genetic factors should not exclude.

Oral cancer is more common in male after 50 years of age and the signs of cancer appeared as thick white spongy lesion with tendency to red or as mass or lump or a fissure or an ulcer, the most common site is the lateral side of the tongue or the floor of the mouth or alveolar bone or the cheek. Hard palate might affect either by primary adeno carcinoma or squamous cell carcinoma from maxillary sinus. Cervical lymph nodes might involve especially submandibular lymph nodes or jugulodigastric than submental lymph node that associated with floor cancer.

The tumors in general classified according to staging of the diseases based on TNM system which is quite simple and informative. We did a lot of research on oral cancer including AgNOR for studing the proliferative activity of cancer cells also we studied apoptotic changes of cancer cells by BcL2 proto-oncogene belong to family of apoptosis, BcL2 was first described in follicular lymphoma that beret 14:18 (q32,q21) translocation. This structural chromosomal aberration leads to over production of BcL2 messenger RNA and protein BcL2 is localized at outer mitochondria and nuclear membrane as well as in the endoplasmic reticulum. In AgNOR we did found the increase number of NORS in the nuclease represent the high malignancy as in poorly differentiated squamous cell carcinoma but the number of NORS in well differentiated squamous cell carcinoma very much reduced, by EM studies showed an irregular shape and size of tumor cells with remarkable divisions of nuclei and chromatin clumps emarginated towards nuclear membrane, few mitochondria with dilated crista and abundant rough endoplasmic reticulum with few apoptotic changes also observed.

Our policy of management of oral cancer is based on 3 lines, line one by radical surgery with supra omohyoid neck dissection and fallowed by 3 courses of chemotherapy (5FU+Toxter+Carboplatin) and finally deep X-ray therapy, sometimes we give a course of chemotherapy before surgery, this type of managements was quiet effective and survival rate were between 3-5 years.

We brought the attention of the world to peculiar and very aggressive rapid growth of jaws tumors nominated as (Kummoona Jaw Lymphoma) during 1977-78. The tumors effect the children between age of 3-6 years, the growth very rapid and duration of illness between 3-4 weeks might terminate the life of children, patients are feverish anemic with high ESR and patients passed through depleting status and children might passed during 3-4 weeks ,the tumors effect the posterior part
of the jaws in the molar premolar area, both upper and lower jaws might involve at once, we think that highly oncogenic virus effect odontogenic tissue of jaws bone, we reported 28 case and only 2 survived and the mortality rate was 92%, it is not Burkett's lymphoma. For understanding the behavior of this disease we did our modified staging of the disease, Stage I (early disease) the tumor found only in one jaw side in molar-premolar region in the mandible or maxilla or in cancer found in single lymph node, Stage II (locally advanced disease), the tumors found in both sides of the mandible or maxilla or in lymphoma cancer found in 2 or more lymph nodes regions in one side diaphragm, Stage III (advanced disease) tumors involve the viscera or in lymphoma cancer, the cancer involve lymph nodes above and below diaphragm, Stage IV (wide spread disease), tumors involve the CNS, bone marrow, reticuloendothelial system, in lymphoma cancer, cancer cells found in several parts of one or more organs or tissue, liver, blood and bone marrow.

The therapeutic regimen based on NCI recommendations, the therapy used was an IV combinations of Vincristine 1.5mg/m2, Adramycin 50mg/m2, cyclophosphamide 1000mg/m2, Methotroxate 10mg/m2 and prednisolone 50mg/m2 in 8 doses and duration of therapeutic regimen for 24 weeks.

We did research by serological studies for Epstein Barr Nuclear Antigen (EBNA), for Early Antigen (EA) and Virus Capsid Antigen (VCA), with print cytology as quick method for diagnosis, plastic sections and EM studies, the general feature of jaw lymphoma the cells oval or round or elongated with high nucleus-cytoplasmic ratio with presence of in vagination or cleft in nuclear membrane, chromatin clumps near nuclear membrane, mitochondria homogenous, some cells showed apoptotic changes with virus like particles scattered and vacuoles also observed, some lymphoblast transferred to plasma cells.