

Editorial

Oral cancer: the current status and strategies of its management

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Oral cancer is designated as carcinomas of the oral mucosa and sometimes as carcinomas of the minor salivary glands in the oral cavity. Carcinoma of the lip should not be included.

Oral cancer is the most common cancer among oral and maxillofacial malignancies. The anatomical structures of the oral and maxillofacial regions are very complicated and closely related not only to facial contour and esthetics, but also to the functions of speech, mastication, swallowing, respiration, facial expression, etc. Oral cancer is a life threatening disease which can destroy facial contour and functions of the oral and maxillofacial organs, seriously influencing the quality of life of patients.

The ultimate goals of oral cancer therapy are to cure the cancer, preserve or restore facial contour and function, minimize the sequence of treatment, and to prevent multiple primary cancers.¹

In the past 30 years, an important breakthrough and achievement in oral cancer management has been the development of functional surgery, leading to a greatly improved quality of life for patients. Included in the functional surgeries are conservative functional surgery, which deals with the preservation of the original organs and their function, and reconstructive functional surgery, which relates to repairing the functions of organs after resection of the cancer. The typical procedure of the former is functional neck dissection, which can treat the disease, preserve the functions of the related structures, reduce facial edema and cervical deformities, and avoid the occurrence of shoulder syndrome, all leading to a better quality of life.² This procedure is applied in elective neck dissection of N0 cases. A representative technique of the latter is functional reconstruction of maxillary and mandibular defects by use of a vascularised free fibular flap or combined free fibular flap for repair of long distance mandibular or maxillary defects. It may also restore the integrity of the dentition by implant techniques upon the basis of the bone graft take. The facial contour and masticatory function are thus repaired.^{3,4}

It is regrettable that the survival rate of oral cancer has not been raised significantly in the last 30 years – according to the USA National Cancer Database.⁵ The overall 5-year survival is around 64% for head and neck cancer. Therefore, there still a lot needs to be done to improve the survival rate.

EARLY DIAGNOSIS AND EARLY TREATMENT

The “Two Earlies” are still the key to improve the survival rate of patients. It is convenient to apply the “Two Earlies” because the oral structures are superficial and can readily be approached. However, most patients are in an advanced stage of disease (stages III and IV) at their first visit. So, for those diseases of the oral mucosa with malignant transformation tendency, such as oral leukoplakia, oral lichen planus, it is necessary to strengthen surveillance and to remove the lesion before it becomes invasive. Modern molecular biology techniques have provided effective measures for diagnosis of early cancer. One report shows that early cancer may be detected from saliva samples.⁶ This may be a new measure for early diagnosis though the value thereof needs further investigation.

APPLICATION OF MULTIDISCIPLINARY COMBINED AND SEQUENTIAL THERAPY

For early oral cancer (stages I and II), surgery alone and/or radiation therapy, can treat the disease. For advanced cases, however, the results of single therapy alone are not usually effective and combined treatment modalities should be applied. The problem of how to combine different methods and what sequence should be adopted remain to be solved. Surgery, radiation oncology, medical oncology, rehabilitation, etc., all may be part of the therapy. There needs to be further investigated as to how the various disciplines can be best applied in the formation of a multidisciplinary combined modality treatment protocol. Dr. Zheng et al's¹ review in this issue has provided a good answer.

TO DEVELOP NEW-THERAPEUTIC MODALITY

The traditional modalities in cancer therapy – surgery, radiation and chemotherapy – are still the main modalities for oral cancer treatment. Use of traditional Chinese medicine in cancer therapy is limited; however, it can improve the general status and reinforce the immunity of the patients, and may be used clinically.⁷ Basic research on oral cancer must be reinforced. Modern molecular biology techniques have expanded greatly in the field of diagnosis and treatment of oral cancer. Some researches^{8,9} have demonstrated the role of genes in the origin and development of oral cancers. There are also many applied

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basic studies, such as immunotherapy, cytokine therapy, gene therapy. As regards new methods and techniques, they should be faced positively and carefully. The use of laboratory findings in the clinic should be fast and examined during their application, but controlled by ethics and regulations.¹⁰

TO DEVELOP MULTICENTRIC, PROSPECTIVE, LARGE SAMPLE SIZE CLINICAL STUDY

Owing to significant individual variations and variation in biological behavior inherent in the location of oral cancers and small sample size, it is often difficult to achieve a precise evaluation. This is particularly true with chemotherapy treatment. So, multicentric, prospective, large sample size studies are necessary to obtain objective conclusions for clinical guidance.

TO STRENGTHEN STUDIES ON REHABILITATION THERAPY

After surgery and radiation therapy of oral cancer, patients present with various types of damage to oral structures and functions, such as limitations in opening the mouth and speech and swallowing dysfunctions; rehabilitation therapy can improve these functions. At present, a set of systematic therapeutic techniques and measures are still lacking. Established measures for treating different organic and functional impairments, with the goal of improving the quality of life of the patient, are urgently required.

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