

## Advances in Surgical Management of Oral Cancer

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The dilemma of surgery in the management of oral cancer is the adequate resection of the primary tumor to effect a cure while at the same time not removing too much normal tissue as that might affect the function of swallowing and speech. The oral cavity has structures and organs that are composed of much tissue and serves different functions. In recent years, the surgical advances in the management of oral cancer are our understanding of the tumor behavior and the application of various flaps for appropriate reconstruction of the defect after adequate tumor extirpation.

The different forms of defect in the oral cavity can be optimally reconstructed with various forms of free tissue. These include the cutaneous flaps for lining, the myocutaneous flaps for tissue bulk replacement and osteocutaneous flaps for lining and reconstruct bony defects. The anastomosis of the sensory or motor nerves provides a chance of functional recovery.

For the management of cervical lymph nodes, the target is to achieve the regional tumor control and survival rate with less extensive resection. With the use of selective neck dissection for N0 neck, adequate information on tumor meta-

stasis to the cervical lymph nodes can be obtained and this is useful in the planning of further adjuvant therapy. Sentinel lymph node biopsy has also been applied for patients with N0 neck. We have used this technique for 10 patients and the accuracy of detecting metastasis was 90%. Reports from multiple clinical centre trials have shown this to be of similar efficacy to selective neck dissection.

For advanced stage cancer of the oral cavity which was deemed nonresectable, concurrent intra-arterial chemotherapy and radiation has been shown to be effective in producing tumor regression. We have used this regimen for 21 patients achieving a complete response rate of 57% (12/21) and a partial response rate of 24% (5/21). For advanced tumor at specific sites such as the tongue base managed with combined chemoradiation, surgery and postoperative concurrent chemoradiation; 2-year survival of over 74% could be achieved.

In summary, with adequate resection and appropriate reconstruction, a better tumor control rate can be achieved with less extensive surgical intervention.