

RECONSTRUCTIVE SURGERY IN HEAD AND NECK CANCER

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An optimal reconstructive procedure should provide the lowest mortality and morbidity, the shortest hospitalization, and the highest rate and most rapid return of function. Recent advances such as the development of myocutaneous flaps and free tissue transfers provide a dramatic improvement over previous surgical options. These techniques offer a safe, rapid and reliable method of structural reconstruction and functional restoration for the majority of defects. Whenever possible reconstruction should be performed primarily and in one stage. Although the myocutaneous pedicled flap, such as the pectoralis major and latissimus dorsi flap, are very useful, free flaps provide opportunities not found with the pedicled flap. Multiple variations and combinations exist for selective replacement of skin, mucosa, muscle and bone. Success rates are equal and in many cases superior to those seen with pedicled flaps. For reconstruction of large soft tissue defects muscle or myocutaneous pedicled or free flaps can be used. The overlying skin of myocutaneous flaps is bulky and provides a poor colour match. A split thickness skin graft, resurfacing the muscle, appears to give a better colour match. Many different techniques can be used for reconstruction of small defects.

Following partial glossectomy it is essential that the mobility of the residual tongue is preserved by using the thin flaps such as fasciocutaneous flaps. Large defects and true total glossectomy resections require enough bulk intraorally to aid in swallowing. The myocutaneous latissimus dorsi or, preferably, rectus abdominis flap carry a skin flap with an amount of subcutaneous fat that provide enough bulk. Combined extra- and intraoral reconstruction is possible with fasciocutaneous or musculocutaneous flaps, a bilobed flap based on the subscapular artery and vein, a combination of two free flaps or a combination of a free and a pedicled flap. Reconstruction of composite oromandibular defects can be achieved with a variety of osteocutaneous free flaps. The ideal flap should consist of skin that is thin, mobile and pliable. The amount of bone should be sufficient with enough mass and height for placement of dental implants. Osteocutaneous flaps that meet these requirements most satisfactory are the iliac crest and fibular flap. Reconstruction of circumferential defects of the pharyngoesophagus is possible using a free jejunal transfer or a free tubed skin flap, a gastric pull-up or a pedicled myocutaneous flap. The enteral techniques usually result in superior anatomical and functional reconstruction.