

Past, Present and Future directions and Rational Approach in Reconstruction of Head and Neck Cancer

Chala Andres

Javeriana University, Colombia

Abstract: Head and neck cancer as well as other tumors is increasing its incidence all over the world; This growth probably may be due to a better life expectancy and its subsequent aging which favors the appearance of tumors in the elderly, due to environmental or carcinogenic exposition and in young people to the increase of HPV related cancer. In developing countries, unlike their counterpart head and neck cancer is diagnosed in more advanced stages. In early stages treatment usually requires a unique modality of treatment, whatever surgery or radiation entails excellent results in terms of survival and quality of life, but in advanced stages, head and neck cancer itself outcomes in a devastating tumor that affects function and esthetics, sometimes with a bulky deforming tumor along with pain, necrosis and bad smelling infection that isolates the patient even from his own family. Additionally, in this stage treatment requires combination of at least two modalities, like surgery and radiation, or chemotherapy and radiation, and often the combination of the three of them. Surgery effects and toxicity of chemoradiation affects function and esthetics and of course impacts quality of life. Reconstruction when necessary, is vital in promoting tissues to achieve a proper scarring while interposing healthy tissue. It also speeds up an earlier start of adjutancy. But maybe the main goal of reconstruction is to improve rehabilitation, function, esthetics, and quality of life. Many decades ago, after tumor resection with ignorance of technics in reconstruction patients coexisted with mutilating surgeries that while controlling cancer left behind devastated human beings condemned to isolation. For more than a century reconstruction has been developing, trying to achieve better results, starting from ingenious techniques just to simply cover a surgical defect, going to techniques that allowed to rotate nearby tissues based on a vascular pedicle that keeps tissue vital up to transplant a new and healthy tissue from distant places of the body economy. Now a day's, In the millennium of technologies and associated with this growth, microvascular free flaps are planned and design with three-dimensional models that enhances the functional results. by implanting a more precise tissue specially when an osteocutaneous reconstruction is necessary. The principal architects

of these achievements have been all the physician and restlessness surgeons that with comprehensive understanding and knowledge of neurovascular anatomy have ventured in new surgical technics putting forward so many possibilities that almost every neurovascular unit is susceptible to be transplanted. But above all, a rational approach must be considered to avoid falling in the trend of inseting free flaps to every patient as a primary option to reconstruct. Unfortunately you can fall from use to abuse and sometimes unnecessary free flaps are used when they could be replaced by a local o pediculate flap achieving similar results; Pediculate flaps can also offer a huge range of possibilities and should not discarded from the beginning. They are also based in a neurovascular unit that can be insetted safely and probably are less consuming in time and resources It is crucial to individualize the reconstructive choice based on each patient, it must be offer the best and simple technique that guarantee first the cure or control of cancer with good quality of life, and left behind the others considerations without abandon them . The analysis includes the type of tissue needed (skin, muscle, nerve, bone, etc.), the function it performs, specifics needs of tissue protection (carotid) or prevention in the serious communication of the oropharynx with the neck, its match , esthetics needs, patient expectations, functional status and comorbidities, experience and skills of the team, and special consideration like the rational use of economical and scientific resources. In that rank the team should explore all the possibilities prior to decide. Maybe that way, a well-planned decision in terms of reconstruction will be done. Units like nose or ear sometimes get better results just with an adequate somatoprothesis and even a surgeon can be tempted to do an effort to reconstruct it as similar and nice as possible, the somatoprothesis may offer better match and form. In conclusion the reconstruction has been developing over decades and now a days there are many options giving the patient a great chance to live a good life in quality , function and even cosmesis, but a comprehensive and rational approach must be considered to fulfill the patient's needs.