Facial Plastic Surgery in Otorhinolaryngology

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Facial plastic surgery has recently been formally incorporated into the training curricula of Otorhinolaryngology in Hong Kong. Facial plastic surgery would now be an integral part of the exit examination in ENT. This has been worrying many higher surgical trainees in ENT. The truth is that the aesthetic and restorative surgery which used to be taught in small separate doses as parts of rhinological, otological and head & neck surgical training would now be packaged and delivered as a focused subject, with extension to cover relevant complementary aesthetic principles and techniques. There is still a long way to go for Hong Kong, though already much delayed from the time when surgeons, mostly Otolaryngologists, in the United States of America formed the American Academy of Facial Plastic and Reconstructive Surgery over 40 years ago. The European Academy of Facial Plastic Surgery has now been established for over 30 years. In June 2009, the Asian Facial Plastic Surgery Society (AFPSS) was born during the Asian Pacific Rhinoplasty Expert Forum in Seoul. This is a very positive step forward and will serve the Asian Pacific region well in encouraging friendship and communication. A consensus curriculum for training and standard regulation will in time be perfected.

Facial plastic surgery does not cover procedures below the clavicle except for the axial and microvascular free flaps frequently employed in head & neck cancer surgery. Aesthetic facial surgery is not, contrary to what is the common perception, reserved for the ‘Rich, Vain and Famous’ as is frequently portrayed by the media. Indeed, many from this group would seek advice for the better self image. Today, plastic surgeons, ENT surgeons, dermatologists, ophthalmologists or even trained technicians under appropriate guidance with their lasers can all deliver good quality results in cosmetic refinement. In actual fact, aesthetic facial surgery, in addition to cosmetic refinement, plays an important role in a wide spectrum of congenital, infective, traumatic and neoplastic conditions in ENT. In such, mostly challenging cases, it is all about the patient, his/her self esteem and global well being. ‘Normality’ is what these patients seek for and cosmetic refinement, if appropriate, could be a major bonus.

Harmony and symmetry form the basis of facial aesthetics. Of all procedures on the face, ‘rhinoplasty’ best illustrates this point. Functional and aesthetic rhinoplasty is a procedure an ENT specialist would have acquired substantial skill in during his training. Proportions, profile, radix depth, nasolabial angle, nasal base triangulation and angle of projection (nasofacial angle) etc. are important guidelines to where the nose should be on the face and how much it should project to achieve harmony and symmetry. The Asian Chinese nose is typically one with low and broadened bridge, flattened tip, elliptical nostrils and poor definitions of the lower lateral cartilages. In a much Westernised city like Hong Kong, preservation of ethnicity in the nose, as is requested by some Negroid patients, is generally not a perceived demand yet psychological and social preoccupation with the Caucasian looking nose tends to be significant. Augmentation of the nasal bridge and tip with silicone implants are hence popular cosmetic procedures.

Closed and open rhinoplasty techniques have each their supporters. Most learn from open and with experience over the years, do less of to minimise scarring and reach their own balance between the two procedures depending on the nature of their practice.

In the public institutions, complex traumatic cases and congenital deformity at the appropriate age are much better handled via the external approach functionally and aesthetically. The nasal deformity in cleft palate patients illustrates this well (Figure 1-7). The complex deformity of the nasal tip can be clearly viewed and accurately corrected. The complex septal deviation can be corrected effectively for airway patency via the open technique with significant functional improvement. The low nasal bridge places the card into the surgeon’s hands as an augmentation rhinoplasty in such deformed noses often camouflages. This greatly enhances self esteem as the Western look overwhelms their long term stigma. Augmentation using either the patient’s costal cartilage or meticulously shaped Gortex, the author’s preference, can achieve pleasing results. Costal cartilage may sometimes be insufficient and can change shape. Auricular cartilage is too soft and minimal in quantity to achieve adequate augmentation and is more appropriate for filling minor defects. As a general principle, grafts to the nasal tip should always be cartilaginous, best rib, and foreign implants should remain on the dorsum only which would minimise complications. Admittedly, the nose after surgery does
change with time over years and as the skin tightens, sharp irregular edges do show if not attended to meticulously at time of surgery, which would then require revision.

Rhinoplasty is often not the only procedure required to achieve harmony. The Asian Chinese, perhaps less so of cleft palate patients, often desire nicely defined eyelid creases, parallel or tapered, to eradicate the typical 'mousy' suspicious look a single eyelid tends to convey. In part, it is the body image desire for the Western look once again. Blepharoplasty is often a complementary procedure to rhinoplasty. The same would be true of a silicone chin implant, to achieve a better balanced profile after augmentation rhinoplasty. Chin implants may be inserted intraorally or transcutaneously and the latter is the preferred approach for placement.

How much or how little, the 'Entire Plan', should always be based on careful and meticulous analysis with prudent surgical planning which cannot be overemphasised.

The face is a familiar territory to most surgeons. A multitude of disciplines are well equipped with the skills to eradicate a lesion on or rejuvenate the face. Excision of basal cell carcinoma and its defect reconstructed with a local random or axial flaps e.g. the forehead flap based on the supratrochlear artery for the nose or the Abbe or Eastlander swings for carcinoma of the lip etc. require no detailed elaboration. Rejuvenation of the face is very much an integral of Facial Plastic Surgery. Rhytidectomy, endoscopic brow lifts are surgical procedures not without their prices and are best reserved for more severe cases of facial laxity or sagging. Laser treatment, chemical skin peel, use of Botox type A for the glabella, crow’s feet, horizontal and perioral dynamic lines can achieve much in less severe cases of wrinkles without the scalpel. Botox A is licensed by the FDA for use in the dynamic lines of the glabella and detailed consent should be obtained for its use for other sites. A maximum dose of 400 units per session 3 months apart should not be exceeded. For static facial lines, fillers are more appropriate. The popular temporary fillers are hyaluronic acid (Restylane) which lasts approximately 4 months and poly-L-lactic acid (Sculptra) which lasts 18 months. The permanent fillers include examples like polyacrylamide (Aquamid) or polymethylacrylate (Artecoll). Fillers are also useful for touching up minor nasal bridge deficits after augmentation and lip asymmetry which is useful in certain cleft palate patients.

Otoplastic work dates back a long way to the 19th century. Protruding ears are present in approximately 5% of the population but the author has not perceived a concern for this in the Hong Kong Chinese population which reflects a clear cultural difference. In the West, pinaplasty is a weekly routine operation for the trainee. Microtia at its different grades is a much more deforming condition and reconstructive procedures using costal cartilage, Medpore and prosthetic ears via osseointegrated implants are all suitable procedures with the former two slightly set back by the tendency of keloid formation in our local population. Keloid formation tends to be less when the procedure is done at 6 years of age as compared to teenage or later. The author prefers the Medpore implant for the better shape and projection though exposure requiring surgical trimming can be problematic.

Aesthetic deficits of the ears, the nose and the Head & Neck defects after tumour resection will continue to challenge the Otorhinolaryngologists in the 21st Century. It is nonetheless encouraging to see the coming together of Otolaryngologists from countries of the Asian Pacific region to brave this challenge. Perfection is probably difficult to achieve in most cases. The secret of joy in facial plastic and restorative work lies in the tremendous enhancement or revival of the sense of global well being in the patient when excellence is aimed for by the surgeon each time.

Legends for Figures 1-7

Cleft nasal deformity before and after Gorex Augmentation and costal cartilage tip reconstruction via external approach.