Management of Children with Cleft Lip
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Introduction
Cleft lip is one of the common congenital abnormalities in Hong Kong children. The occurrence rate, for cleft lip/cleft palate or cleft lip & palate, is as high as 1 in 800 new born. The advancement of ultrasound machine & experience of related doctors have much increased the chance of early prenatal diagnosis. It is early enough for the parents to make decision & arrangement for termination of pregnancy. The local birth rate has been decreasing and it is 10.9/1000 this year. These are the major reasons why new born with cleft lip ± palate is getting “uncommon”. The figures do not include “really uncommon” conditions like macrostomia nor median cleft lip. This paper serves as a general review of the problem which may be especially useful to those who are not so familiar with the topic.

Aetiology
A unilateral cleft lip results from failure of fusion of the medial nasal prominence and the maxillary prominence on one side. A bilateral cleft lip results from failure of fusion of the merged medial nasal prominences with the maxillary prominence on either side.

The causes may be familial. In fact, a normal couple with a cleft baby has a higher chance than the general population to bear another cleft offspring. Genetic counseling is necessary for the parents which is available in the Department of Health in Hong Kong.

Vitamin deficiency has been incriminated but there has not been any convincing conclusion. Infectious reason like viral cause has also been postulated, as there is definitely a seasonal pattern for the birth of babies with cleft lip.

Diagnosis
The diagnosis of most cleft lip conditions are usually quite obvious on physical examination. However one must always be alert on the minor clefts. The hints are usually present if the oronasal symmetry & the vermilion border are examined.

Management of the Parents & Family Members
The birth of a cleft baby is a major traumatic event to the parents & the grand parents. Be patient & let the family members air out their questions. Most of these questions are not difficult but we need to be very careful on questions that are related to familial causes & prenatal care. It is the writer practice to disclose the possible causes only to the parents. The operative schedule should also be informed. Showing the family members the postoperative photos of similar degree of deformities will be most soothing.

Assessing the Child
It is said that when a child has one congenital abnormality, then there is a higher chance that other abnormalities are present. It is important to confirm or exclude other congenital abnormality; especially the life threatening ones. Cleft lip is not a life threatening condition.

Feeding
Most incomplete cleft lip babies do not have feeding problems with bottles. However the negative intraoral pressure that needs to be generated for suction cannot be created in complete cleft lip babies especially in the bilateral situation. The best & economical way to deal with the problem is to use squeezable plastic milk bottles with enlarged tit hole.

Cleft babies also need to be feed by spoon or syringe at least once a day. This is to make sure the baby learns these two other ways of feeding. Bottle-feeding is not allowed in the immediate postoperative period until the stitches are off.

Operation Schedule
Technically, the operation can be performed at any time after the child is born. In general, the rule of ten is adopted. That is the baby is operated after ten weeks old, with body weight over ten pounds & haemoglobin level over ten. The risks in general anaesthesia are much reduced when these parameters are attained.

Operation for Unilateral Cleft Lip
The parents are informed of the operation nature and the risks involved before they signed the consent form. The aim of the operation is to repair the defect and realign the deranged muscle back to the normal anatomical position. The end result should be a lip with relatively normal look both statically & dynamically.
Many methods of repair have been described in the past decades & their popularity have changed with time. At present the rotation advancement repair method is most popular. The writer has been using this method for the past twelve years.

The operation is performed under general anaesthesia. System antibiotic is given intravenously. Incision lines are marked followed by Adrenaline (1:200,000 normal saline dilution) infiltration. After a few minutes, skin incisions are made down to the surface of the muscle followed by raising of the so called A, B, C flaps plus undermining of the skin on the non-cleft side. Orbicularis oris muscles on both sides are freed from their abnormal insertion. Mucosa are cut back laterally on both sides to facilitate closure. At this point the level of both cupid peaks should be checked. If the line that joins up both peaks is not horizontal, then further cut back is needed on the non-cleft side to increase the rotation. For incomplete cleft lip some normal skin near the tip of the cleft may need to be excised. After checking haemostasis, the lip is repair in layers; with mucosa by absorbable suture of Catgut, muscle by synthetic absorbable suture like Vicryl & skin by non-absorbable suture of nylon (Dermalon).

Operation for Bilateral Cleft Lip
The pre-operative formalities and the aim of the operation are the same as for unilateral cleft lip.

The writer now uses the simple repair method. The Millard’s repair was used earlier by the writer. However besides a longer operation time, the total length of the final scars are longer than the simple repair one’s. Furthermore it makes the rhinoplasty that is needed at the later age much more difficulty and the final outcome less satisfactory.

The operation is performed under general anaesthesia. Incision lines are marked followed by Adrenaline (1:200,000 NS dilution) infiltration. After a few minutes, skin incisions are made both sides down to the surface of the muscle followed by undermining of the skin. The prolabial skin flap is raised to the base of the columella. Orbicularis oris muscles on both sides are freed from their abnormal insertion at the alar base and mobilize adequately for approximation under the prolabial flap. Mucosa are cut back laterally on both sides to facilitate closure. The mucosa on the prolabium is mobilized from the incision wound. After checking haemostasis, the distance between the alar bases are narrowed by Vicryl. The lip is then repair in layers; with mucosa by Catgut, muscle by Vicryl & skin by Dermalon. It is essential to anchor cut short catheter to both nostrils to ensure patency; otherwise they will be blocked by tissue oedema & blood clots resulting in respiratory distress.

Post Operative Management
The patient is propped up to 30 degrees to reduce venous oozing and oedema. Both upper limbs are restrained to prevent disturbance to the wound.

Systemic antibiotic is continued. The wound is exposed and applied with Chloramphenical Ointment tds (not for patient with G6PD deficiency). The IV drip is continued until the patient takes enough milk by spoon or syringe orally.

For bilateral cleft lip (especially complete type), it is mandatory for the nurse to apply suction regularly to clear the fluid in the nasal catheter. Oximeter is required to monitor these bilateral cleft patients’ blood oxygen level. The catheters can be safely removed on postoperative day 4.

The stitches can be off on postoperative day 7. The patient can start bottle-feeding if the wound heals well.

Follow Up
The patient is usually followed up about one week after off stitches. The parents are taught how to massage the scar to hasten scar maturity and prevent scar contracture formation. It is the writer’s observation that massage with Contractubex Gel can speed up the scar maturing process.

Special dental care is very important after the surgery. The writer always refers the cleft patients to Dental Specialists Clinic of the Health Department. Under the Dental Ordinance, all cleft patients are entitled to the full range of Dental services including filling of caries, Orthodontic treatment and Oromaxillofacial surgery.

The patients are followed up four monthly for the first year. Thereafter, the patients are seen every year until around the age of twenty, when all post-cleft lip-nose refinement surgeries are completed.

Conclusion
Cleft lip repair is one of the most job satisfied surgical procedures for a Plastic Surgeon. A well-repaired cleft lip can bring great joy to the parents and a bright future for the child.
The Current Trend of Oriental Cosmetic Surgeries
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Cosmetic Surgery has become extremely popular in the last decade; the reason of this explosive growth are many, the frequent publication by the media, the economic independence of the female population, the readily available medical informations including the internet, the breakdown of the old taboo against aesthetic surgeries, meantime there is rapid advance in aesthetic treatments, surgical or non surgical.

The current trend in the cosmetic surgery practice is the mini invasive aesthetic procedures, although the mega surgical treatments still exist, patients are more prone for the mini invasive aesthetic procedures, the main reasons are minimal downtime, some of the procedures can be repeated at frequent intervals at wish.

Of the more popular mini invasive procedures are the use of endoscopic surgery (such as brow lift), the short scar face lift, the fat injection to fill up facial imperfection, the explosive use of Botox to erase facial expression wrinkles and the use of laser for facial rejuvenation.

It is not the purpose of this article to name all the current oriental aesthetic surgical techniques. However it worths mentioning a few as follow:

**Oriental blepharoplasty** – Upper eyelid surgery to create a supra palpebral fold (lack of well formed supra tarsal fold is common among Orientals) – so called double eyelid surgery – the current trend calls for the shortest possible scar as little as 1 cm long or shorter.

**Lower blepharoplasty** – for removal of eye bag, the current trend is sub-conjunctival approach, the use of laser can minimize bruising, part or all of the protruding fat is preserved, suturing of the septal fascia to the arcus marginalis is often used to prevent relapse and to repair the nasal jugal deformity. Canthopexy to prevent eyelid malposition is almost a must if the external approach is used.

**Rhinoplasty**

a) Augmentation rhinoplasty – since Oriental is often born with a flatter nasal bridge, this procedure is quite popular, nowadays hundreds of smartly prefabricated nasal prosthesis are available for use, the results are pleasing.

b) Other forms of tailoring of the nasal deformities are available, such as weir excision of the wide ala, tip sculpturing with or without autologous cartilage graft are quite popular also, big nose may be made smaller, long nose may be made shorter, likewise short nose may be easily made longer.

Face lift – is common, since Oriental skin ages much slower than the caucasion, coupled with the tendency of easy scar formation, the trend is to have short scar face lift, (an attempt to avoid scar deformity in the posterior neck), this technique in fact has been used for years by our Oriental Surgeons, this philosophy is currently starting to be appreciated as well by surgeons in the West.

Body sculpture – Liposuction is common, mainly due to the increasing obese population, not infrequently the fat harvested can be utilized to fill out defects in the face, in some SE county the harvested fat is used to inject into the breasts for augmentation, most surgeons in the world look upon this technique with skepticism, since the injected fat may be calcified and it can confuse the detection of cancer in the female’s breasts. With improved understanding of the fluid balance and the invention of tumescent techniques, this procedure becomes effective to minimize post-op morbidity such as bruising.

Aesthetic Breast Surgeries – Mammary augmentation remains popular, the Oriental female tend to have smaller breasts, the current trend calls for the use of textured or smooth round saline filled prosthesis via an small incision at the axilla or the areola, endoscopic technique is frequently used to ensure clean bloodless dissection, the size of the prosthesis has increased over the year from 120-150 cc in the 60-70 to about 200-250 cc or bigger recently.

There is talk in the last 2 years about the use of a vacuum device (Brava cup) to increase the size of the breast non surgically to as much as 120-150 cc, the practical aspect of the technique is still under investigation.

Hair transplant is becoming more popular, mega mini hair transplantation technique is being done with increasing popularity, over 1000 to 2500 hair may be transplanted in one operation with amazingly natural looking result and with minimal down time. The future of Oriental Cosmetic Surgery is bright, there is no limit of its growth, it is clear that this branch of plastic surgery is being fully accepted by the community.