

Creativity of Beauty with Creating Dimple – Review

Arun kumar.S¹, Rama Brahmam Lanke², Atul Bishnoi³, Priya Matani¹, Manpal Kaur⁴

¹Post graduate in Department of Conservative Dentistry & Endodontics, MGS Dental College & Research Centre, Sriganaganagar,²Masters in Environmental And Occupational Health Sciences, Western Kentucky University,³Senior lecturer in Department of Conservative Dentistry & Endodontics, MGS Dental College & Research Centre, Sriganaganagar, ¹Post graduate in Department of Prosthodontics , MGS Dental College & Research Centre, Sriganaganagar,

Abstract

Body modifications are now a day most common in place,face-lifts, lip modification etc,. Plastic surgery is not a new thing. People have been getting nipped and tucked for so many years. Dimples are small visible indentations on the surface of the body, many people and in many cultures are appreciate the presence of dimple on face and they thought a sign of good fortune and prosperity. Now adays with the popularity of cosmetic surgery and celebrities with dimples, there has been a recent trend developed for having artificial dimple on face. With this demand in people many surgeons are create artificial dimple with dimple surgery or “dimpleplasty. The dimpleplasty procedure involves making a cut in skin around the mouth and stitching the underside of the skin to a deeper layer to create a small depression. The stitch holding the skin in place dissolves leaving the patient with a permanent scar which maintains the dimple.Of course, any surgery is risky. Every surgeon will tell you that – But dimpleplasty surgery comes with a few risks that really need to be highlighted.

KEY WORDS: dimple, dimpleplasty, dimple surgery, cosmetic surgery.

Corresponding author: Arun Kumar S, Post Graduate Student, Department Conservative and Endodontics, Maharaja Ganga Singh Dental College and Research Centre, Sriganaganagar.

This article may be cited as:Kumar AS, Lanke RB,Bishnoi A, Matani P ,Kaur M Creativity of Beauty with creating Dimple – Review Int J Com Health and Med Res 2017;3(1):37-40

Article Received: 21-02-17

Accepted On: 23-02-2017

INTRODUCTION

Many people are appreciate the presence of dimple on face and also Dimples on the cheek look attractive and are thought a sign of good fortune and prosperity in many cultures. Dimples on cheeks enhance facial beauty and expression.¹ Dimples are small visible indentations on the surface of the body. Mostly they are visible on different parts of body such as shoulder, abdomen, back, limbs. When dimples present on the face are highly prized beauty of face, and it is an important outlet for expressing thoughts and emotions beyond the words. Dimples tend to accentuate a smile, which increase the perception of attractiveness, expressions, and facial beauty² Dimples are present in both the sexes without any particular preponderance may occur

unilaterally or bilaterally and they are genetically inherited as dominant trait.^{3,4} Occurrence of dimples are depends on many factors .This is a characteristic feature inherited in an autosomal dominant fashion the cleft chin dimple is on chromosome5 and cheek dimples are on chromosome16, with variable penetrance.¹ Many researchers in their research observed and concluded that parents with dimples on cheek will pass to the children. Dimples are may be transient or permanent,it is depends on the process of growth and development of dimple. Transient dimples are developed due to disappearance of Excessive deposited fat with the aging process,whereas the stretching or lengthening of muscles during growth may lead to gradual

obliteration of the facial feature¹ This explains why some dimples are more common in children age groups. Dimples on the face are commonly situated on the cheeks and chin, although the latter occurs less frequently.⁵ Studies of human facial anatomy of the dimple explains that it is an abnormal insertion of the muscles of the face. Usually formed a small defect in the buccinator muscle of cheek. Such as dermocutaneous insertion of the fibers on the inferior bundle of the bifid zygomaticus major muscle. ⁴With the popularity of cosmetic surgery and celebrities with dimples, such as Cheryl Cole, Preity Zinta, Alia Bhatt, Depika Padukone, Jennifer Garner and Catharine, there has been a recent increase in demand for create artificial dimple on face using dimple surgery, or "dimpleplasty." Dimpleplasty is a surgery to create dimple on face artificially to improve the smile and beauty appearance. Although it is a small surgical procedure and begins several decades ago, it has been gaining some recent popularity and media coverage. Dimple surgery is performed by skilled cosmetic surgeons under local anesthesia. Many surgical techniques are present to do dimpleplasty, such as transcutaneous sutures or by an open technique that is performed through the mouth, which would show no scarring. Most of the techniques involve adherence of the buccinator muscles of the face to the dermis of the skin.⁶

Procedure for creating dimple

Position of dimple:

This dimpleplasty surgery can be done under local anesthesia or general anesthesia. Before going to the surgery we should decide the position of the dimple. Most of the times its done by patient in front of the mirror if patient is not able to decide the site of the dimple, BOO-CHAI reported another landmark described from the cosmetic view points, it is the intersection of a perpendicular line drawn from the external canthus and horizontal line drawn from the angle of the mouth ⁷ However, most of the times we consider the position of the dimple at the point of intersection of the perpendicular line dropped from the external canthus and horizontal line drawn from the highest point of the cupid's bow laterally. It has also been our observation in patients having natural dimples that if the person sucks his cheeks inside, the area of the maximum depression is the area of the dimple. Similarly, the patient is asked to create a negative suction and suck the cheeks inside. The site of the maximum depression is the marked site of the dimple.

Surgical methods:

So many techniques are developed to create dimple artificially some of the techniques are discussed below. In 1962, Khoo Boo Chai⁷ reported a technique with non-absorbable suture as a sling between skin and buccinator muscle. In this technique, simulation occurred by integumentary insertion of the muscle. Shiwei Bao et al.⁶ reported a technique, in this technique they used syringe needle to guide a monofilament nylon suture through the dermis and the active facial muscles such as the buccinator muscles. They formed a sling between the skin and buccinator muscle. Dimple is created by tying knot. Saraf et al⁸ proposed a procedure to create the dimple through an intraoral approach with the help of a punch biopsy instrument. After administering the anesthesia, Hypodermic needles passed through the marked line into the buccal mucosa. A soft tissue trephine bur connected to a latch-type hand piece with a speed of 10 to 20 rpm is use to punch the buccal mucosa. While punching mucosa the opposite hand should pushed the buccal mucosa inward and support this area externally. The soft tissue cylindrical fragment containing of the mucosa, a small portion of the buccinator muscle, and a part of the Bichat fat pad was removed with scissors, and the skin was kept intact. Next, the most important part of procedure is defect closure. Defect closure is performed by placing a nonabsorbable suture (No. 3-0 silk) or submucosal absorbable suture (No. 3-0 Vicryl; Ethicon, Somerville, NJ) through the cheek mucosa, muscle, and Bichat fat pad on 1 side of the defect then through the dermis layer of the skin and finally, through the Bichat fat pad, the buccinator muscle, and the mucosa on the other side of the defect. The knot is tied, and the dimple will be created. Patients should be instructed to maintain good oral hygiene in the immediate postoperative period and advised not to smile fully during the first 2 weeks. The dimple became prominent in the initial few weeks after surgery and resembled a natural dimple (appearing only on smiling) within 4 to 6 weeks. Suture removal done after 10 to 14 days of surgery (in nonabsorbable suture cases). Dimple surgery may done through open surgical method by creating a scar in the dermis which adheres to the underlying muscle, and becomes a natural dynamic dimple. This procedure can perform under local anaesthesia. Local anesthesia administered from the skin side down to the mucosal side at the marked site. A small stab incision is made with a No. 15 knife, 2cm

anterior (towards the lips) to the marked site of the dimple. Incision should be away from the papilla of the stensons duct to avoid injury to the stannous duct,. The No.15 blade is then inserted through the small stab on the mucosal aspect, with its sharp edge facing the skin. After the blade with its sharp edge comes below the marked site of the dimple, the skin is scraped of all the mucomuscular attachments. A similar procedure is done on the mucosal side, procedure should be done carefully to avoid breach the mucosa. The area of scraping is depend on size of the dimple needed, if a wider dimple required, a wider area is scraped, so that two raw areas are created which will adhere to each other and create the wide dimple. Similarly, if a smaller dimple is required, a proportionately smaller area is scraped. After the scraping is complete, on palpation we can feel a dent bimanually. In adequate scraping may leads to failure to get desired depression, and needs further scraping. The next step is to create and maintain the adhesion. With the help of a straight needle and suturing material stitch is placed through the skin, brought out through the mucosa, reinserted through the mucosa and brought out through the skin and a bolster not is applied. The advantage of the bolster is to have a better longitudinal dimple. we can use a silicon cylinder (block) as a bolster as it is more hygienic and it keeps the suture dry ,clean from food debris and moisture. We should avoid excessive tightening of the stitch to prevent the ischaemia of the mucosa¹¹.Then advise the patient to take antibiotics and analgics and meticulous oral hygiene with mouth wash. The bolster stitch will be removed after 7 days. Initially, dimple is static and deepens on animation, but gradually with time there is only a hint of dimple when static and accentuates on animation.With the many surgeons opinion, the key to correct tissue grasping in dimple creation surgery is creating of a faint dimple in the planned area without any stretching of the suture or knot tying. In other words, knot is just used to adjust the depth and size of created dimples. Tighten the knot may leads to narrower the dimple, patients with “chubby” cheeks, where the depth of the field and fat tissue can make precise suturing difficult⁹.Thomas et al¹⁰;in 2010 introduced a new technique for improved surgical access as an alternative to blind coring methods. According to this technique, after patient preparation and induction of either local or general anesthesia, hypodermic needles were passed through the marked line into the buccal mucosa; a vertical incision was made on the mucosa at this site, with

care taken to avoid any injury to the Stensen duct; an L or T limb was then added to the vertical cut; and the mucosal flaps were elevated. A few fascicles of the buccinator muscle were bluntly dissected over an artery forceps, a No. 3-0 Prolene suture (Ethicon) was passed through the proximal portion of the muscle fibers, the dermis was exposed, the muscle fibers were cut immediately distal to the stitch, and the muscle was sutured to the dermis. An additional suture was placed between the muscle and dermis to secure the myodermal attachment, and an absorbable suture was then passed between the submucosa and the dermis. Finally, the mucosal incision was closed with No. 4-0 chromic catgut sutures.⁷The simple closed and open procedures to create the dimple is described in this article, provides a predictable outcome with minimal complications, which makes it an excellent alternative to existing techniques.

Risk assessments during and after dimple surgery

Usually, dimple surgery is an extremely safe procedure, but like any other surgical procedure, there are inherent risks are present.⁸may possible of Mild post operative swelling after surgery for two to three days but resolves itself in two to three days.The risk of bleeding during or after the dimple surgery, possible of formation of infections and abscess in cheek post operatively, the risk of injury to the buccal branch of facial nerve during surgery.^{8,9} Uncommon complications with local anesthesia. Scar formation at operated area, Persistence of unwanted dimples weakness of the involved muscles after the surgery⁹. transcutaneous sutures can cause puncture scars and have been reported to cause foreign body granulomas.^{1,4}Risk is minimized with proper oral hygiene and antibiotics. The risk of injury to the buccal branch of facial nerve is extremely uncommon. However, early recognition and management of complications is important to avoid unpleasant aesthetic complications^{8,9}.

CONCLUSION

In sum. It can be concluded that dimple surgery is very safe procedure done at out patients in less time with minimum discomforts. With the described procedures for placing the dimple in cheeks are very simple and easy to perform by surgeons.

REFERENCES:

1. Omotoso, G. O., Adeniyi, P. A., & Medubi, L. J. (2010). Prevalence of facial dimples amongst South-western

- Nigerians: A case study of Ilorin, Kwara State of Nigeria. *Int. J. Biomed. Hlth. Sci.* Volume, 6(4).
2. Argamaso, R. V. (1971). Facial dimple: its formation by a simple technique. *Plastic and reconstructive surgery*, 48(1), 40-43.
 3. Gassner, H. G., Rafii, A., Young, A., Murakami, C., Moe, K. S., & Larrabee, W. F. (2008). Surgical anatomy of the face: implications for modern face-lift techniques. *Archives of facial plastic surgery*, 10(1), 9-19.
 4. Daponte, A. P., Vienna, A., Brant, L., & Hauser, G. (2004). Cheek dimples in Greek children and adolescents. *International Journal of Anthropology*, 19(4), 289-295.
 5. Pessa, J. E., Zadoo, V. P., Garza, P. A., Adrian, E. K., Dewitt, A. I., & Garza, J. R. (1998). Double or bifid zygomaticus major muscle: anatomy, incidence, and clinical correlation. *Clinical Anatomy*, 11(5), 310-313.
 6. Bao, S., Zhou, C., Li, S., & Zhao, M. (2007). A new simple technique for making facial dimples. *Aesthetic plastic surgery*, 31(4), 380-383.
 7. Boo-Chai, K. (1962). THE FACIAL DIMPLE-CLINICAL STUDY AND OPERATIVE TECHNIQUE. *Plastic and Reconstructive Surgery*, 30(2), 281-288.
 8. Saraf, S., & Pillutia, R. (2010). Complication of dimple creation. *Indian dermatology online journal*, 1(1), 42.
 9. Keyhan, S. O., Khiabani, K., & Hemmat, S. (2012). Dimple creation surgery technique: A review of the literature and technique note. *Journal of Oral and Maxillofacial Surgery*, 70(6), e403-e407.
 10. Thomas, M., Menon, H., & D'Silva, J. (2010). Improved surgical access for facial dimple creation. *Aesthetic Surgery Journal*, 30(6), 798-801.
 11. Lari, A. R., & Panse, N. (2012). Anatomical basis of dimple creation—A new technique: Our experience of 100 cases. *Indian journal of plastic surgery: official publication of the Association of Plastic Surgeons of India*, 45(1), 89.

Source of support: Nil

Conflict of interest: None declared

This work is licensed under CC BY: *Creative Commons Attribution 4.0 License*.