

## Complication of Dimple creation

Sir,

Dimples on the cheek look attractive and are thought a sign of good fortune and prosperity in many cultures. With increasing demand to look better the demand for surgically created dimples is increasing. The procedure is usually simple, safe and straightforward; however, rarely, complications can occur.

A 27-year-old female presented to us with bilateral cheek abscesses following dimple creation surgery which was done elsewhere 1 month ago. The patient noticed painful swellings over the cheeks, predominantly involving left cheek, after 10

days of surgery which gradually increased, with restriction of mouth opening. At the time of presentation, the left cheek abscess was enormously tense while the right cheek abscess was more indurated. [Figures 1–3] Ultrasound was suggestive of bilateral loculated cheek abscesses [Figures 4 and 5]. The cheek abscesses were drained with breaking of loculi under general anesthesia by intraoral approach. The patient got immediate relief from the pain and achieved satisfactory mouth opening. The patient recovered in 3 weeks time with ugly scarring of the cheeks [Figure 6].

Dimples are usually considered as an attractive feature of facial beauty. They occur in both the sexes with no particular preponderance, may express unilaterally or bilaterally and are genetically inherited as a dominant trait.<sup>[1,2]</sup> Anatomically, dimples are thought to be caused by insertion of fascial bands



Figure 1: Cheek abscesses following dimple creation



Figure 2: Left cheek



Figure 3: Right cheek

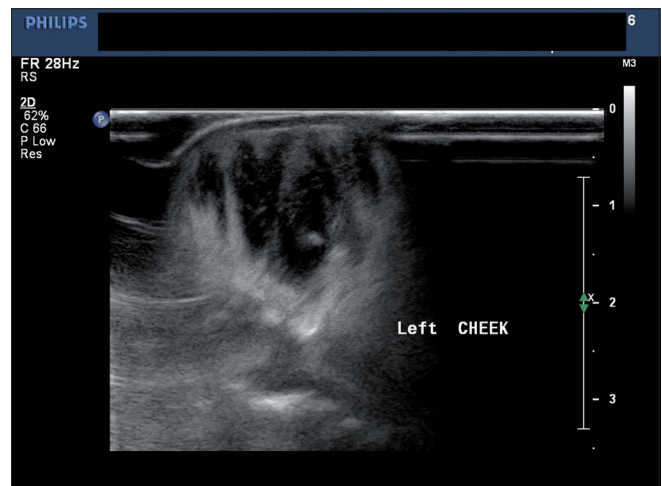


Figure 4: Ultrasonography left cheek

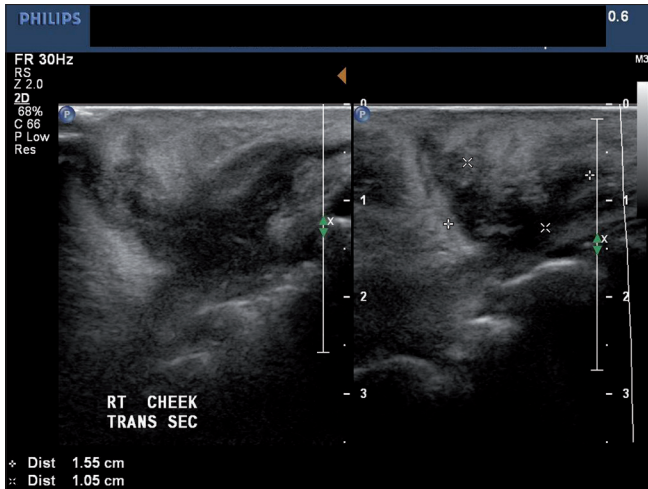


Figure 5: Ultrasonography right cheek

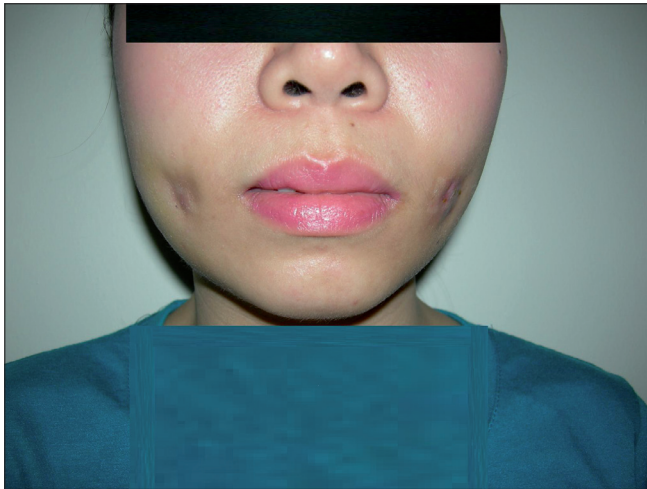


Figure 6: 3 weeks after the drainage of abscesses

of zygomaticus major muscle into dermis or dermal tethering effect of zygomaticus major muscle which may be bifid.<sup>[3,4]</sup> Dimples, however, may also be acquired and are often seen after localized trauma over the face.

Dimple surgery is a simple out patient procedure done under local anesthesia. The dimple is created with the help of a punch biopsy instrument by an intraoral approach and a circular core composed of mucosa, submucosal fat, and cheek muscles is removed sparing the skin. This creates a shallow cylindrical-shaped defect under the skin. A suture is then taken through the cheek muscle on one side of the defect, then through the dermal layer of the skin and finally through the cheek muscle on the other side of the defect. The knot is then tied resulting in dimpling of the skin.

Usually, dimple surgery is an extremely safe procedure, but like any other surgical procedure, there are inherent risks. The

risk of bleeding during or after dimple creation is quite low. Infection is exceedingly rare and the 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 results.

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## REFERENCES

1. Argamaso RV. Facial dimple: Its formation by a simple technique. *Plast Reconstr Surg* 1971;48:40-3.
2. Pentzos Daponte A, Vienna A, Brant L, Hauser G. Cheek dimples in Greek children and adolescents. *Int J Anthropol* 2004;19:289-95.
3. Gassner HG, Rafii A, Young A, Murakami C, Moe KS, Larrabee WF Jr. Surgical anatomy of the face: Implications for modern face-lift techniques. *Arch Facial Plast Surg* 2008;10:9-19.
4. Pessa JE, Zadoo VP, Garza PA, Adrian EK Jr, Dewitt AI, Garza JR. Double or bifid zygomaticus major muscle: Anatomy, incidence, and clinical correlation. *Clin Anat* 1998;11:310-3.