Bilateral dimples that are rarely seen in the lower alignment of the mouth corners (Fovea inferior anguli oris)

R Kosif, M Diramali, S Sertel Meyvaci

INTRODUCTION

Dimples are usually seen as a charming characteristic of facial beauty. They take place in both genders with no specific preponderance, may state unilaterally or bilaterally and are genetically inherited as a dominant trait. Besides the most seen dimples in our face, buccal and mental; rarely inferior to the level of anguli oris, fovea inferior anguli oris can also be seen. Bilateral dimples have been found on a 20-year-old female medical student which appeared in the alignment of her mouth corners and below 17.49 mm when she was laughing. This dimple was named as fovea inferior anguli oris in our article. Additionally there was fovea buccalis in her right cheek. There was a dimple background in the student’s family. Her grandmother had the same bilateral dimples while the mother had bilateral fovea buccalis. Fovea inferior anguli oris occurs as congenital in the interception points of m. orbicularis oris, m. depressor anguli oris and m. depressor labii inferioris muscles. The frequency of occurrence is unknown.

Key Words: Rarely seen dimple; Fovea inferior anguli oris

CASE REPORT

A rare dimple was encountered on a 20-year-old female medical student. Bilateral dimples were found 17.49 mm (measured by digital caliper) below the corner of her mouth that were not noticed in normal posture but when she was laughing (Figures 1 and 2). This facial chin dimple appeared in the alignment of her mouth corners and emerged at the interception points of m. orbicularis oris, m. depressor anguli oris and m. depressor labii inferioris muscles (Figure 3). This dimple was named as fovea inferior anguli oris in our article. There was also a fovea buccalis observed slightly on the right side.
DISCUSSION AND CONCLUSION

The fact is that dimples are essentially genetic imperfections that are derived from shortened facial muscles. Dimples are caused by a deficiency in the subcutaneous connective tissue that develops in course of the embryonic progress. A variation in the pattern of the facial muscle may also lead up dimples. Dimples frequently take place on both, a single dimple on one side is a rare phenomenon (6).

The genetics of dimples is basically rather interesting. They are a dominant trait, which signifies that it only takes one gene to inherit this defect. If neither parent has dimples, their children shouldn’t have them either, unless they experience a spontaneous mutation. If one parent has them, the child has a 25-50% chance of inheriting the gene, since it implies that parent inherited the gene from one or both parents. If both parents have dimples, the child has a 50-100% chance of inheriting the gene, based on how the parents inherited theirs (6). When a person smiles, the shorter muscle on the face upraises the facial skin. This situation creates a slight depression in the skin, which refers to as dimple (7). Variations of the zygomaticus major muscle lead cheek dimples to form. The mentalis muscle, which appears around the jawbones, fails to close at the chin thereby leaving a gap. Hence, the appearances of chin dimples or cleft chin deformity.

In this case, a gap congenitally occurs at the interception points of the m. orbicularis oris, m. depressor anguli oris and m. depressor labii inferioris muscles, and when the lower lip is pulled down, a dimple appears while she is laughing. Two different dimples fovea buccalis and fovea inferior anguli oris are seen same female person. There has been limited research on the anatomy of dimples and there is no study showing the frequency of this different kind dimple and multi-dimple according to genus.

REFERENCES