Deep Labiomental Fold With Pseudocomedones

The labiomental fold is a transverse indentation of the face, which marks the intersection of the lower lip and chin. It plays a significant role in movement of the lower lip and in facial expression. We describe herein a child with a linear pattern of microcomedones located along a deep labiomental fold.

Report of a Case | A 7-year-old healthy girl presented with a line of black papules on her chin. On examination, the child had a protruded chin with a relatively deep labiomental groove. Several open comedones were aligned along the groove (Figure). Acneiform lesions were not present in any other location on her face or upper trunk.

Discussion | Three muscles, the circular orbicularis oris, depressor labii inferioris, and mentalis align the labiomental fold or cross it as they pass to their insertion. The fibers of the 3 muscles are attached to the skin by thick bands of fibroelastic fibers. The mentalis muscles originate from the mandible and serve as paired elevators of the central lower lip. They usually overlap and insert into the deep dermis of the chin pad. Patients with substantial overlap of the mentalis muscles tend to have a deep labiomental fold. The presence of a deep labiomental fold is a relatively common condition and may sometimes cause an aesthetic concern. Procedures for treating deep labiomental fold are sometimes discussed in the plastic surgery literature, but it has been rarely reported in the dermatology literature. To our knowledge, this is the first report of a dermatologically related condition associated with this fold.

Figure | Deep Labiomental Fold and Open Comedones in a Linear Pattern Along the Fold

Several comedone openings are marked by arrows.

Another prevalent transverse linear crease of the face, the nasal crease, appears across the lower third of the nasal dorsum. In some cases, changes of pigmentation, milia, or pseudo-comedones are present along the nasal crease. Transverse nasal milia in the absence of a transverse nasal crease are less frequently reported. Recently, our research team reported a case of seborrheic keratosis-like hyperplasia and horn cysts aligned along this crease. These findings were attributed to the fact that the triangular cartilage and the alar cartilage attach in a linear fashion at the junction of the middle and lower third of the nose, producing a potential embryonic fault line in which retention cysts presenting as milia and comedones can occur.

Early acne lesions favor the forehead, nose, and chin in many children. Although many times overlooked, the external ear is another common location for open and closed comedones in young patients with acne. We think that the common concave surface of the nasal crease, deep labiomental fold, and external ear may facilitate the appearance of retention lesions in those locations.

In conclusion, we think that the labiomental fold, a transverse fold of the chin, can harbor retention cysts or comedones in a similar fashion to the nasal crease. Dermatologists should be aware of this fold, since it might be encountered in the dermatology practice and may be associated with additional dermatologic conditions.

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