

## Research Assessment #4

**Date:** October 18, 2020

**Subject:** Changes in the Facial Skeleton with Aging: Implications and Clinical Applications in Facial Rejuvenation

**MLA citation(s):**

Mendelson, Bryan, and Chin-Ho Wong. "Changes in the facial skeleton with aging: implications and clinical applications in facial rejuvenation." *Aesthetic plastic surgery* vol. 36,4 (2012): 753-60. doi:10.1007/s00266-012-9904-3

**Assessment:**

After viewing a facelift procedure for one of my mentor visits, I decided to research more about facial rejuvenation and aging. The article I chose to assess discussed how the facial skeleton impacts aging and the most common areas that age. I have been familiar with facial aging, but very mildly, and I know that aging is commonly associated with drooping of the skin, eyelids, and facial skin. One way to improve the aesthetics of the face in regards to aging is to lift the soft tissue as well as inject dermal filler in the areas that need revision. This article particularly focuses on the skeleton and what implications that aspect of the body has on aging which was something I had not researched before.

The article's true focus is on the fact that bone resorption causes aging in certain areas (759). One interesting point the article made was that strong skeletal structure can have a significant impact on how one ages. In the article, the authors said that individuals with a stronger skeletal structure will age better because of the lower tendency for bone resorption (758). One new implication of this fact is the way that genetics can play a role in skeletal structure and aging as well. When researching articles pertaining to facial plastic surgery, I have

not seen many topics that discuss the genetic implications of certain procedures or processes.

However, when researching about aging, the article mentions that genetics can play a huge role in aging due to the inheritance of skeletal structure that can affect bone resorption (758).

In addition to skeletal structure, the authors of the article also included information about orbital aging. The orbital region refers to the area around the eye and the article discussed how this area has the greatest tendency to absorb and how the absorption makes the under eye protrude which leads to the prominence of the medial fat pad (754). This is very similar to what Dr. Cain told me during our first mentor visit. He told me that usually when people age, the area around the maxilla starts to depuff and lose fat (this is also one reason why the physician should ask a patient who is interested in buccal fat removal if they are okay with the possibility of looking older as the years progress). Along with the loss of fat in the face, there is bone resorption which makes the orbital age and allows for the under eye area to puff out. The combination of face with minimal fullness and protruding under eye area gives the appearance of old age. In order to minimize these effects, the procedure I witnessed performed a lower lid blepharoplasty for the under eye area and filled the face with filler.

One of the final pieces of information in the article that was really interesting to me was perinasal changes that occur from aging. The authors of the article talked about how aging will result in a lengthened nose and drooping tip as soft tissue ages (755). One of the key pieces of information to note is the change in the appearance of the nose. Many individuals who age sense that their nose aesthetics changes as they age in that their nose appears less preferable. As a result, I noted the fact that people of higher ages are also prime examples of individuals who undergo surgical and nonsurgical rhinoplasty in order to retain a youthful appearance.

As a whole, this article gave me great insight into how skeletal structure impacts aging and bone resorption as well as the role of genetics and age in terms of altered nasal appearances. Through the information I learned, I have gained a greater understanding of the specific areas of the face that contribute to aging and how best to address these issues.