Introduction: Lower blepharoplasty is very common procedure for midface rejuvenation. In the east Asian, even young people have lower eyelid bulging and discoloration that are resulted by under growth of maxilla. Maxilla is 3-dimentional bone with width, height and anteroposterior length. Undergrowth of anteroposterior direction causes small orbit and hypoplastic infraorbital rim which make positive vector between eyeball and maxilla in East Asian. However, there is no data reported the age related bony changes in East Asian. Therefore, the aim of present study is to evaluate age dependent morphological difference of maxilla in East Asian.

Methods: We reviewed 55 patients' charts and facial CT images ranging in age group: group A (21-30 years), and group B (41-50) years, and group C (61-70 years). All patients have no congenital or acquired facial deformity and history of facial trauma. The lengths of the orbital roof and floor(anteroposterior length)and the angle of the anterior wall of the maxilla were recorded on parasagittal images through the midline of the orbit for each patient.

Results: The lengths of the orbital roof at their midpoints showed significant differences between group A and group B (p<.01). The lengths of the orbital floor showed significant differences between group A and group B (p<.001). The angle between the anterior maxillary wall and the orbital floor was no significant between group A and B. The lengths between group B and C are no significant differences

Conclusions: Our result is quite different with previously reported Caucasian data. Our result can explain race differences with bony aging. For midface rejuvenation, we suggest that fat injection under facial muscle or inserting implant on infraorbtial area will be more effective for restoring volume loss of bone in East Asian, while cheek lift is good to restore ant maxillary wall resorption in case of Caucasian.