

Association of Condylar Bone Quality with TMJ Osteoarthritis

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Appendix

Appendix Table. Patients' chart review and phone interview contents.

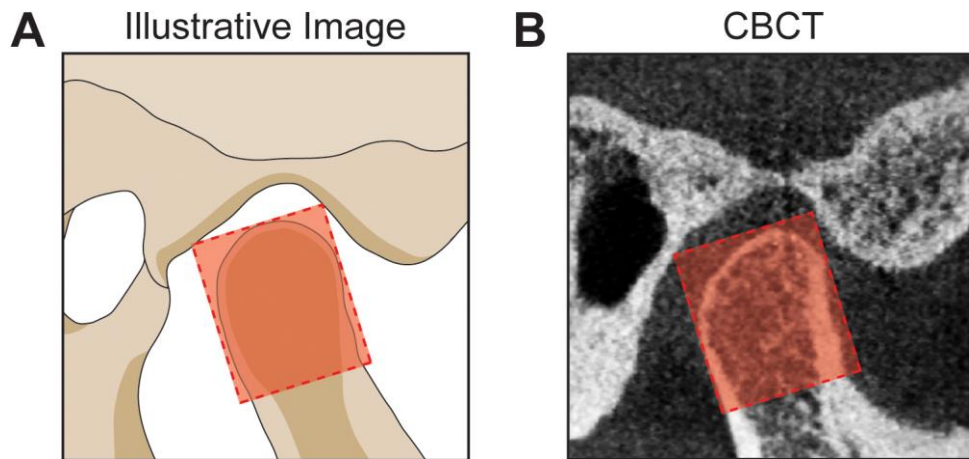
Personal profile	a. Gender b. Age c. Smoking d. Alcohol e. BMI: Person's weight in kilogram divided by the square of height in meter. f. Socioeconomic status: Whether the patient has the subsistence allowance from government [†]
Medical history	a. Major organ or systemic diseases* (e.g. diabetes, hypertension, rheumatoid arthritis, secondary osteoporosis, etc.) b. Hormone replacement therapies (e.g. Premarin [®] , Cenestin [®] etc.) c. Psychological illness (e.g. depression, manic disorder etc.)
Craniofacial deformity	a. Misaligned teeth: Including moderate to severe malocclusion (Angle classification II & III) [‡] b. Others*: Severe deformities in the development of the growth of the head and facial bone (e.g. cleft lip & palate, hemifacial microsomia, hemangioma, etc.)
Dental history	a. Poor dental treatment history: Patients who have been through secondary treatment due to the first treatment failure; Patients who are unable to finish dental treatment procedures before; Patients who has degenerative tooth due to the delay of endodontic treatment or prosthodontics restoration b. History of major jaw or facial injury*: Nasal fracture; Zygoma fractures; Mandibular fractures; Frontal region fractures; Maxillary fractures; Supraorbital rim fractures, etc. c. TMJ dislocation: Including both occasionally or habitually
Mastication habits	a. Habitually one-side chewing b. Habitually clenching of the jaw c. Habitually lip biting d. Teeth grinding during sleep e. Excessive gum chewing (more than twice a day and five days a week)

BMI: body mass index, TMJ: temporomandibular joint

*Excluded in this study

[†]Based on the Chinese population

[‡]Referred from Contemporary Orthodontics 5th edition, Mosby (April 16, 2012)



Appendix Figure. Representative images of ROI for CT analysis.

A-B. Illustrative image (A) and CT scanned image (B) of the condyle with ROI for CT analysis. The ROI was customized individually for each patient to include the whole bone area from the horizontal line (the tip of condyle) to the narrowest level of the condylar neck. ROI is shown as the red shadow box.

CBCT: cone beam computed tomography, ROI: region of interest.