Fatma Rashed, Biol Syst Open Access 2015, 4:2
http://dx.doi.org/10.4172/2329-6577.S1.003

OMICS International
conferenceseries.com

3rd International Conference on
Integrative Biology

August 04-06, 2015 Valencia, Spain

A comparative study of the dentition and temporomandibular joint anatomy and histology in adult dogs

Fatma Rashed
Alexandria University, Egypt

Purpose: To describe and evaluate normal adult dog dentition and temporomandibular joint anatomically and histologically in comparison to humans.

Methods: Five adult dogs (6-12 months old) were used in this study. The following anatomical structures were histologically evaluated in a qualitative fashion: Teeth and related bony structures mandible, mandibular condyle, disc, Zygomatic arch, temporal bone, glenoid fossa, retrodiscal tissue and synovia. The macroscopical and microscopic study of the human TMJ was based on the current literature.

Results: Dogs have three Incisors, one canine, four premolars, and 2 molars in the upper and 3 molars in the lower jaw. The TMJ is surrounded by a thin fibrous tissue capsule, and a synovial lining. The mandibular angle has a prominent shape. The glenoid fossa is flat, with extended mediolaterally with retroarticular process. Histologically, the TMJ is composed of different tissues that comprise the mandibular head, mandibular fossa and fibrocartilaginous disc. A layer of fibrous tissue covers the articulating cortical condyle and temporal bone followed by a layer of hyaline cartilage.

Conclusion: Morphologically and numerically dog's teeth are different from humans. Morphologically and histologically, the articular structure of dogs is, on the whole, similar to that of humans. In these animals there is no articular eminence, but they have a retroarticular process.

Biography

Fatma Rashed has completed her master degree at the age of 29 years from Alexandria University, and currently hold the position of Assistant lecturer at oral biology department faculty of dentistry, Damanhour University.

fatma.rashed@hotmail.com

Notes: