



Morphology of the Temporomandibular Joint (TMJ) of Sheep (*Ovis aries*)

PDF (Size: 362KB) PP. 242-244 DOI: 10.4236/ojvm.2012.24039

Author(s)

Amol S. Patil, Gunit K. Bindra

ABSTRACT

The detailed anatomy of TMJ of sheep was explored so that it could be used as an experimental animal for study of condylar growth. The experimental animal was a 3 month old sheep, head of which was procured from a local abettor. The results showed that the sheep is an excellent experimental model for the study of condylar growth, with and without the use of functional appliances, because of similarity in anatomy related to size, shape and position of the condyle to that of human beings. Thus, it is concluded that the study will help future investigators in the field of dentistry to consider the sheep as an experimental animal for further research.

KEYWORDS

Sheep; TMJ; Condyle

Cite this paper

A. S. Patil and G. K. Bindra, "Morphology of the Temporomandibular Joint (TMJ) of Sheep (*Ovis aries*)," *Open Journal of Veterinary Medicine*, Vol. 2 No. 4, 2012, pp. 242-244. doi: 10.4236/ojvm.2012.24039.

References

- [1] S. J Maynard and R. J. G. Savage, " The Mechanics of Mammalian Jaws," School Science Review, Vol. 40, No. 4, 1959, pp. 289-301.
- [2] F. Jochen, and G. Tomasz, " On the Development, Morphology and Function of the Temporomandibular Joint in the Light of the Orofacial System," Annals of Anatomy—Anatomischer Anzeiger, Vol. 189, No. 4, 2007, pp. 314-319. doi:10.1016/j.aanat.2007.02.024
- [3] R. Sprinz, " A Note on the Mandibular Intra-Articular Disc in the Joints of Marsupialia and Monotremata," Proceedings of the Zoological Society of London, Vol. 144, No. 3, 1965, pp. 327-338. doi:10.1111/j.1469-7998.1965.tb05185.x
- [4] S. W. Herring, " TMJ Anatomy and Animal Models," Journal of Musculoskeletal and Neuronal Interactions, Vol. 3, No. 4, 2003, pp. 391-394.
- [5] S. W. Herring, J. D. Decker, Z. J. Liu, and T. Ma, " The Temporomandibular Joint in Miniature Pigs: Anatomy, Cell Replication, and Relation to Loading," The Anatomical Record, Vol. 266, No. 3, 2002, pp. 152-166. doi:10.1002/ar.10049
- [6] A. Bermejo, O. González, J. M. and González, " The Pig as an Animal Model for Experimentation on the Temporomandibular Articular Complex," Oral Surgery, Oral Medicine, Oral Pathology, Vol. 75, No. 1, 1995, pp. 18-23. doi:10.1016/0030-4220(93)90399-0
- [7] J. J. Thomson, L. E. Grovum, A. G. Deswysen, and W. W. Bignell, " In Vivo Surface Strain and Stereology of the Frontal and Maxillary Bones of Sheep: Implications for the Remodeling and Mechanical Optimization of Cranial Bones," The Anatomical Record, Vol. 264, No. 4, 2001, pp. 325-338.

[OJVM Subscription](#)[Most popular papers in OJVM](#)[About OJVM News](#)[Frequently Asked Questions](#)[Recommend to Peers](#)[Recommend to Library](#)[Contact Us](#)

Downloads:	9,960
Visits:	64,996

[Sponsors >>](#)