Commentary
Volume 11:1, 2022

Journal of Spine

ISSN: 2165-7939 Open Access

Thoracic Vertebrae: An Overview

Jacques Dubost*
Department of Neuroscience, Stanford University, USA

Commentary

Between the cervical and lumbar vertebrae, the thoracic vertebrae make up the intermediate part of the vertebral column of vertebrates. There are twelve thoracic vertebrae in humans, which are intermediate in size between the cervical and lumbar vertebrae; they grow in size as they approach the lumbar vertebrae, with the lower ones being significantly larger than the upper ones. Facets on the sides of the bodies for articulation with the heads of the ribs, as well as facets on the transverse processes of all, save the eleventh and twelfth, for articulation with the tubercles of the ribs, differentiate them. T1–T12 are the human thoracic vertebrae, with the first (T1) closest to the skull and the others descending the spine toward the lumbar area, according to tradition.

The heart-shaped bodies in the middle of the thoracic area are as wide in the anteroposterior as they are in the transverse direction. They resemble the cervical and lumbar vertebrae at the ends of the thoracic area, respectively. They're slightly thicker behind the ears than in front, flat above and below, convex from side to side in front, deeply concave behind, and constricted laterally and in front. They have two costal demi-facets on either side, one above, near the root of the pedicle, and the other below, in front of the inferior vertebral notch; these are covered with cartilage in the fresh state, and when the vertebrae are articulated with one another, form oval surfaces for the reception of the rib heads with the intervening intervertebral fibrocartilages.

- The inferior vertebral notches are big and deeper than in any other section of the vertebral column, and the pedicles are pointed backward and somewhat upward.
- The laminae are large, thick, and imbricated, which means they cover adjacent vertebrae like roof tiles and join with the pedicles to protect and surround the spinal cord.
- The intervertebral foramen is a tiny, circular opening with two at each intervertebral level, one for the exiting nerve roots on the right and one for the exiting nerve roots on the left.
- The vertebral foramen, commonly known as the spinal canal, is a wide hole posterior to the vertebral body. At the thoracic level, it contains and protects the spinal cord.
- The spinous process is long, triangular in cross section, and oriented obliquely downward from the lamina to a tuberculated extremity. These processes overlap from the fifth to the eighth, but the orientation above and below is less oblique.
- The superior articular processes are thin bone plates that protrude upward from the intersections of the pedicles and laminae; their articular facets are nearly flat and directed rearward, a little laterally, and upward.
- The inferior articular processes are united to the laminae to a large extent, and protrude just slightly beyond their lower borders; their facets are directed forward, a little medial ward, and downward.
- The transverse processes develop from the arch behind the superior articular processes and pedicles; they are thick, strong, and long, obliquely rearward and laterally oriented, and each ends in a clubbed extremity with a tiny, concave surface on the front for articulation with a rib tubercle. [1-5].

References

1. Araki, Jun, Masahiro Jona, Hitomi Eto and Noriyuki Aoi et al. "Optimized preparation method of platelet-concentrated plasma and noncoagulating platelet-derived factor concentrates: maximization of platelet concentration and removal of fibrinogen." *Tissue Eng. Part C Methods* 18(2012): 176-185.
2. Armentano, I., L. Marinucci, M. Dottori and S. Balloni et al. "Novel poly (L-lactide) PLLA/SWNTs nanocomposites for biomedical applications: material characterization and biocompatibility evaluation." *J. Biomater. Sci. Polym. Ed*. 22 (2011): 541-556.
3. Arora, Navneet S., Thaminda Ramanayake, Yan-Fang Ren, and Georgios E. Romanos. "Platelet-rich plasma: a literature review." *Implant Dent.* 18(2009): 303-310.
4. Asghari, Fatemeh, Mohammad Samiei, Khosro Adibkia and Soodabeh Davaran et al. "Biodegradable and biocompatible polymers for tissue engineering application: a review." *Artif Cells Nanomed Biotechnol* 45, no. 2 (2017): 185-192.
5. Avitabile, Elisabetta, Laura Fusco, Silvia Minardi and Lucia Gemma Delogu et al. "Bioinspired Scaffold Action Under the Extreme Physiological Conditions of Simulated Space Flights: Osteogenesis Enhancing Under Microgravity." *Front. Bioeng. Biotechnol*. (2020): 722.

How to cite this article: Dubost, Jacques. "Thoracic Vertebrae: An Overview" *J Spine* 11 (2022): 521.

***Address for Correspondence:** Jacques Dubost, Department of Neuroscience, Stanford University, USA, E-mail:pugetjin@uter.ac.uk*

Received: 08 January 2022, Manuscript No. jsp-22-52985; **Editor assigned:** 10 January 2022, PreQC No. P-52985; **Reviewed:** 14 January2022, QC No. Q-52985; **Revised:** 21 January 2022, Manuscript No. R-52985; **Published:** 26 January 2022, DOI: 10.37421/jsp.2022.11.521