Advanced Techniques in Biology & Medicine

ISSN: 2379-1764

OPEN ACCESS Freely available online

Commentary

Note on Abnormalities that Impact the Cervical Vertebrae

Peckmann Blanco*

Department of Medicine, University of Senor de Sipan, Lambayeque, Peru

DESCRIPTION

Cervical spine is made up of seven stacked vertebrae. The cervical spine's first two vertebrae are distinct in both form and function. At the base of our skull is where the first vertebra (C1), also known as the atlas, starts. It is a ring-shaped bone. It is named for the Greek mythological character atlas, who carried the universe on his shoulders. The head is held upright by the atlas. The atlas can pivot against the second vertebra, also known as the axis, for the side-to-side "no" rotation of the head. Facet joints, which connect the seven cervical vertebrae (C1 to C7) at the rear of the bone, allow the neck to move forward, backward, and in a twisted position.

Additionally, muscles, nerves, tendons, and ligaments encircle the cervical spine. Intervertebral disks, often known as "shock-absorbing" disks, are located between each vertebra. The core of the spine is where our spinal cord is located. The spinal cord transmits and receives information from our brain, which regulates every bodily function.

The cervical spine serves a number of purposes, including:

Safeguarding the spinal column: The vertebral foramen, which extends from the base of our head through the cervical vertebrae, thoracic (middle back) vertebrae, and finishing between the first and second lumbar (lower back) vertebrae, is the passageway through which the spinal cord's nerves travel. The spine's stacked vertebrae form a central canal that shields the spinal cord when all of them are together.

Holding the head still while permitting movement: The weight of our head is supported by the cervical spine (average weight of 10 to 13 pounds). Additionally, it permits rotation, side to side bending, forward (flexion), backward (extension), and side to side turning of the head and neck (ear-to-shoulder; lateral flexion).

Ensuring the vertebral arteries have a secure route: Vertebral arteries that provide blood to the brain travel through tiny openings in the cervical spine vertebrae C1 to C6. The only vertebra in the entire spine with perforations in the bone that enable arteries to pass through.

Illnesses and abnormalities

Problems with the cervical spine, the surrounding soft tissues, and the nerves are the cause of numerous diseases and ailments includes:

Radiculopathie cervicale: When cervical vertebrae squeeze a nerve in the neck, this disease develops. This might feel discomfort, numbness, weakness, and tingling. The arm, hand, and fingers may be affected in its entirety or only a localized area. A pinched nerve or cervical nerve compression are other names for cervical radiculopathy.

Neck ache: Neck discomfort is a frequent sign of a wide range of illnesses and accidents. Common reasons include growths (tumors, cysts, bone spurs), whiplash, emotional stress, physical strain, bad posture, degenerative disorders (osteoarthritis, spinal stenosis, ruptured disk, pinched nerve), meningitis, rheumatoid arthritis, and cancer.

The condition of the cervical disk: When the disks in the cervical spine deteriorate, this causes cervical degenerative disk disease.

A disk herniation: The disks that act as a cushion between the vertebrae are torn or leaky in this syndrome. This can bend and move with ease thanks to the intervertebral disks.

Cervical osteophytes: Any of the seven vertebrae in the cervical spine might develop bone spurs, which are growths.

Cervical spondylosis: The age-related, progressive degeneration of the cervical spine's disks and joints is known as cervical spondylosis, commonly known as neck arthritis.

Damage to the cervical spinal cord: An injury to the cervical vertebrae results in a spinal cord injury. A quick, severe impact to the vertebrae causes the majority of spinal cord injuries.

A fractured cervical spine: A burst fracture, which occurs when a vertebra is crushed in all directions, a fracture-dislocation, or compression fracture of the spine, can occur (often from modest trauma in an individual with osteoporosis) (mostly from vehicle accidents or falls from heights).

Correspondence to: Peckmann Blanco, Department of Medicine, University of Senor de Sipan, Lambayeque, Peru, E-mail: peckmann@unmsm.edu.pe

Received: 26-May-2022, Manuscript No. ATBM-22-18386; **Editor assigned:** 31-May-2022, PreQC No. ATBM-22-18386 (PQ); **Reviewed:** 14-Jun-2022, QC No. ATBM-22-18386; **Revised:** 21-Jun-2022, Manuscript No. ATBM-22-18386 (R); **Published:** 28-Jun-2022, DOI: 10.35248/2379-1764.22.10.364

Citation: Blanco P (2022) Note on Abnormalities that Impact the Cervical Vertebrae. Adv Tech Biol Med. 10:364

Cervical spondylotic myelopathy: In this condition, the cervical region of the spine experiences pressure on the spinal cord. One of the most typical causes is osteoarthritis, a disorder marked by wear and tear on the spine's bones.

Cervical stenosis: The spinal canal in the cervical spine region narrows, which causes this illness. The cervical spine's reduced space limits the room available for the spinal cord and nerves that emerge from it. The spinal cord or nerves may experience irritation, compression, or pinching as a result of a constricted area.

Cancer and cervical spinal tumor: Inside the spinal column, tumors are aberrant tissue growths. They can either be cancerous or non-cancerous (benign) (malignant).

Meningitis: An infection of the meninges is known as meningitis. The brain and spinal cord are encased in a layer of protection called the meninges.

Osteomyelitis: Osteomyelitis is an infection of the bone, in this example, the vertebrae in the spine, caused by bacteria or fungi. Vertebrae may die if the condition is not treated.