

FUNCTIONS OF THE CERVICAL SPINE

On top of this complex of bones and washers rests the head which contains our computer system, the brain, and the important sensors associated with it such as the eyes, ears, nose and mouth. Together the vertebrae, discs and head form a series of flexible joints which allow the head to turn almost 180 degrees from one side to the other, to look up and down, and to bend sideways. In addition the head can adopt many positions that are combinations of the movements mentioned above.

The main functions of the cervical spine are to support the head, allow it to move in many directions and adjust its position in fine degrees in order to assist the working of the sensors; and to provide a protected passageway for the bundle of nerves that extends from the brain to the sacrum, the tail end of the spine.

The neck has a high flexibility due to the specially designed structure of the joints, in particular those between the uppermost vertebrae and the head. Its flexibility is further increased because in this area no bony structures are attached to the spine. Thus, the neck can move relatively more freely than the rest of the spine where movements are restricted by ribcage and pelvis. On the other hand, because the neck is not surrounded and protected by other structures, it is also more vulnerable than the rest of the spine when subjected to strains. The very flexibility, so helpful and necessary for everyday living, is also the cause of many of our problems. The wide range of movement of the neck exposes it to an equally wide range of stresses and strains.

NATURAL POSTURE

The side view of the human body (*Fig. 2:4*) shows that there is a small inward curve in the neck just above the shoulder girdle. This is called the cervical lordosis. It is this curve in the spine that concerns us mainly in this book.

When standing upright the head should be carried directly above the shoulder girdle, thus forming a small but visible cervical lordosis. (*Fig. 2:4*) Due to postural neglect people can often be seen to carry the head in front of their body with their chin poking forward. (*Fig. 2:5*) Now the cervical lordosis is

altered in shape and distorted. In this position the joints of the lower neck are relatively bent forwards or flexed, whereas those between the upper part of the neck and the head are bent backwards or extended. This is called the protruded head posture (*Fig. 2:5*) and, if present often and long enough, neck problems may develop.

Fig. 2:4
Side view of human body with good posture.

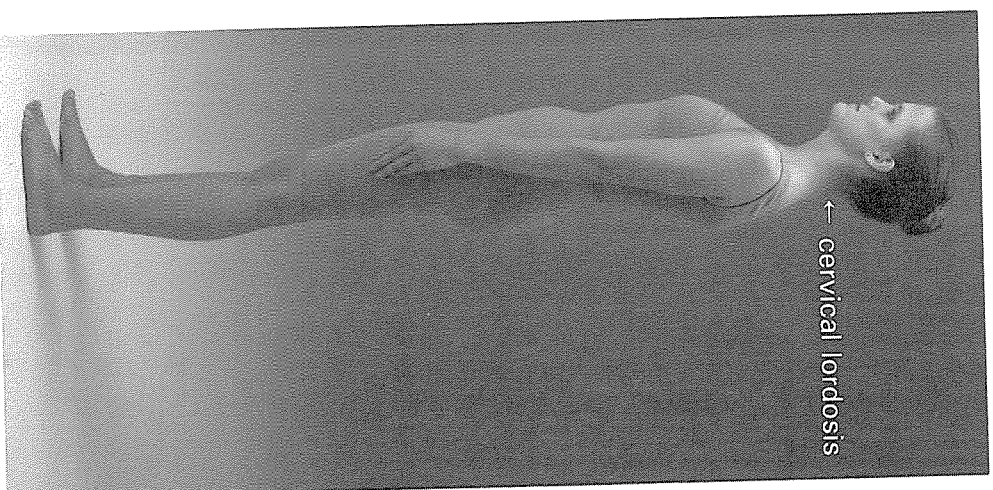


Fig. 2:5
Bad posture.

