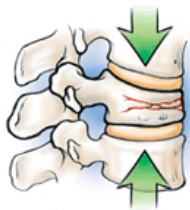


COMPRESSION FRACTURE OF THE SPINE

Definition: Fracture (as of a vertebra) caused by compression of one bone with another.^{1,6}

Pathophysiology: Caused by compression of one vertebra with another. The gradual thinning of the intervertebral disks, osteoporosis and faulty posture contribute to this condition. The compression forces on the vertebra forces the thoracic and lumbar vertebra to assume a "wedge" and biconcave shape respectively. Thus, further increasing the kyphosis(hunch/round back) of the back.¹



Compression Fracture



Round Back



"Wedge" Deformity

Surgery: Treatment of the underlying disease process if possible, is the primary importance. In more advanced cases, it may be necessary to apply a light spinal brace or corset. If the symptoms are located in the neck area, a Thomas collar may be used to support the head.¹



Thomas Collar

Physical Therapy: The physical therapist attempts to maintain correct posture, strengthen the muscles of the back and abdomen and expand the chest. These can be achieved by postural exercises, stretching, modified sit-ups and back strengthening exercises. Patient education regarding his/her condition further enhances the treatment sessions.^{1,4,7}



Sit-ups for abdominal strengthening



Back strengthening exercises

References:

1. Handbook of Orthopaedic Surgery by Brasher and Raney, 10th Ed.
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4. Rehabilitation Medicine by De Lisa and Ganz 3rd Ed.
5. Orthopedic Rehabilitation by Brotzman, 1st Ed.
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7. Therapeutic Exercises by Kissner and Colby 4th Ed.

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