



The Medical **Bulletin**

In Metabolism

In patients with osteoporosis, the cumulative effects of vertebral compression fractures (which are frequently occult) often lead to a narrowing of the distance between the lowest anterior rib (the 10th rib, at its most inferior point, which is generally the mid-axillary line) and the top of the iliac crest. This narrowing can be easily measured by fingerbreadths on examination with the patient in the seated or standing position. Even in asymptomatic patients, this measurement may be a helpful diagnostic clue to the presence of subclinical compression fractures. A distance of 2 fingerbreadths or less progressively increases the odds of such fractures, and at 4 fingerbreadths they would be virtually excluded

Treatment is aimed at postural training (to avoid contact of the rib with the pelvis) and other physical therapy modalities. If these are not effective, then a local injection of anaesthetic and corticosteroid may sometimes be of benefit. In all cases, reassurance as to the benign nature of the diagnosis and avoidance of further testing is helpful. A similar syndrome of back and flank pain may develop in these patients in which the tip of the 12th rib contacts the top of the pelvis posteriorly.

Patients with osteoporosis may develop chronic pain over the tip of the 10th rib where it contacts the pelvis, and this may be strongly suspected based on features of the clinical examination.

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