

IMAGES IN CLINICAL MEDICINE

Severe Kyphosis



Boris Blechacz, M.D.
Ognjen Gajic, M.D.

Mayo Clinic
Rochester, MN 55905

AN 89-YEAR-OLD WOMAN WAS ADMITTED TO THE HOSPITAL WITH HYPERCAPNIC RESPIRATORY FAILURE. She had a long history of osteoporosis. Bone densitometry revealed a T score for the lumbar spine of -4.8 . She was taking subtherapeutic vitamin D and calcium supplements and had declined treatment with bisphosphonates. Over a period of 4 years, her T score declined further, to -5.0 . A radiographic study showed multiple vertebral compression fractures that resulted in serious kyphosis. Progressive dysphagia secondary to thoracic deformity developed, resulting in a 26% weight loss over a period of 4 years. When she was admitted to the hospital, she reported weakness and shortness of breath. Multiple attempts at placement of a nasogastric tube were unsuccessful because of marked esophageal kinking. Her respiratory status worsened, and she ultimately required fiberoptic intubation. Attempts to wean the patient from mechanical ventilation failed, and she died 10 days after admission to the hospital. Severe kyphosis in the elderly often is due to osteoporotic vertebral fractures, which may lead to mechanical complications such as dysphagia, respiratory failure, and ultimately death.

Copyright © 2008 Massachusetts Medical Society.