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VIEWPOINT

Giant Lipoma of the Back Caused Compression Fracture of the Thoracic Vertebral Bones

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A giant lipoma was defined by Sanchez et al[1] as a lesion that measures at least 10 cm in one dimension or weighs a minimum of 1000 g. Guler et al[2] reported a giant lipoma causing cosmetically unacceptable gibbosity, difficulty with sitting in an erect position and getting dressed, avoidance of going outside because of cosmetic concerns, and the inability to lie in the supine position. Here, we describe our experience of treating a giant lipoma of the back which caused compression of the vertebral bone.

CASE REPORT

A 69-year-old man who had been admitted due to heart failure and whose giant tumor of the back had been pointed out 2 years previously was readmitted due to heart failure on February 17, 2018. A giant tumor of the back was resected under general anesthesia after he consented to the operation on March 22, 2018 (Fig. 1). The resected tumor weighed 4.37 kg and was diagnosed as the huge pedunculated lipoma with degenerated changes without evidence of malignancy.

Coronary computed tomographic angiograhy to assess heart failure revealed hematoma around the 12th thoracic vertebra on March 9. He underwent magnetic resonance imaging due to complaint of back pain on March 30, and was diagnosed with acute compression fracture of the 11th and 12th thoracic vertebrae because of the hematoma findings above and an old compression fracture of the third lumbar vertebra (Fig. 2).

The patient consulted an orthopedician and was provided with a corset. He was discharged because his activity of daily life improved due to decrease of back pain. He had no history of osteoporosis, and bone density scanning showed a density of 965 and 833 mg/cm^2 in the lumbar spine and femural neck, respectively. Both findings were within the normal range.

However, he was prescribed warfarin for 9 months because of artrial fibrillation. The dose ranged from 1.75 to 5 mg to keep the prothrombin:international normalized ratio at 2.0.

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Fig. 1. A giant lipoma of the back of a 69-year-old man.

DISCUSSION

A giant lipoma is primarily considered a cosmetic problem and causes functional limitations such as difficulty with dressing and sitting in an erect position and an inability to lie in the supine position.[2] The transformation of a large lipoma (>10 cm) to a liposarcoma is rare, but histopathological examination of large lipomas must be performed carefully to rule out malignancy.[2]

We could not find a report of thoracic or lumbar compression fracture caused by a giant lipoma of the back. He had no history of osteoporosis.

The acute compression fracture of the thoracic vertebrae occurred during his hospital admission shown by findings of the hematoma around the fracture area. In patients taking long-term warfarin, axial and bone density is reported to decrease.[3] However, it was reported that in 1,833 patients prescribed warfarin for less than a year, the risk of osteoporotic fracture was not increased significantly.[4] Warfarin is also not significantly associated with osteoporotic fracture among the elderly, providing reassurance for elderly patients on long-term oral anticoagulants.[5]

Fig. 2. Magnetic resonance imaging T2 emphasized scan shows acute compression fracture of the 11th and 12th thoracic vertebrae and old compression fracture of the third lumbar vertebra.

This patient was prescribed warfarin only for 9 months and his bone density data were within the normal range. The magnetic resonance imaging findings suggest history of an old compression fracture of the third lumbar vertebra and an acute fracture of the 11th and 12th thoracic vertebrae. Therefore, the giant lipoma must have caused compression fracture of the thoracic vertebrae.

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DISCLOSURE:

The authors have no financial interest to declare in relation to the content of this article.

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