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An Uncommon Case of Severe Alcohol-Induced Osteoporosis Presenting as Extensive Multilevel Vertebral Compression Fractures

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CASE DIAGNOSIS

Six Vertebral Compression Fractures Secondary to Alcoholism Related Osteoporosis

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CASE DESCRIPTION

- 48 y/o F, four months peri-menopausal, with eight-month history of low back pain
- Vertebral compression fractures T8-12,
 L3-4; DEXAT score -3.3 at L3 vertebra
- Treatment: Alendronate, cruciform anterior-spinal hyperextension brace, referred for kyphoplasty which was later denied
- Vit D, PTH, Ca WNL; no evidence of malignancy or metastatic disease on hematological work up
- Outside hospital records showed two-week hospitalization for hepatic encephalopathy due to alcohol abuse eight months prior to clinic presentation
- Patient had stopped drinking after hospitalization and did not share this information

DISCUSSION

- Although uncommon, alcohol abuse can cause severe osteoporosis and significant fracture burden
- Alcohol abuse screening is imperative to identify underlying etiology of osteoporosis
- For our patient, extensive investigation and record review was necessary given the discordance of the multilevel vertebral compression fractures and absence of other osteoporosis risk factors

CONCLUSION

- Patients may not be forthcoming regarding histories of alcohol abuse
- A high index of suspicion for alcohol as a causative factor for osteoporosis and vertebral compression fractures should be maintained especially in the absence of malignancy or other traditional causes
- Counseling against alcohol abuse in these patients is necessary for decreasing future fracture risk

Unknown alcohol consumption

Lower back pain PMR referral; treatment with Alendronate, brace and referral for kyphoplasty Kyphoplasty denied due to chronicity of fractures and concern for more fractures with procedure

Undisclosed hospitalization

Workup and imaging



Figure 1. CT T-Spine w/o Contrast

Review of outside hospitalization records revealing hepatic encephalopathy



Figure 2. CT L-Spine w/o Contrast.