

56-year-old female with a reported history of Paget's disease, osteoporosis on bisphosphonate therapy, presenting with bilateral hip pain.

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HEALTH

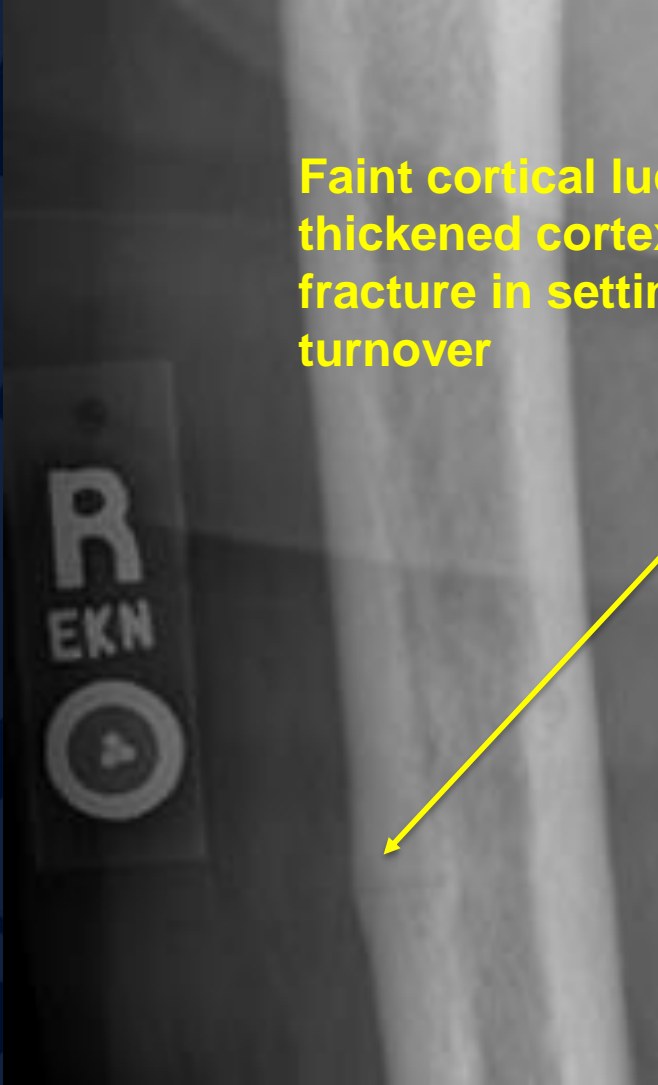
RADIOLOGY

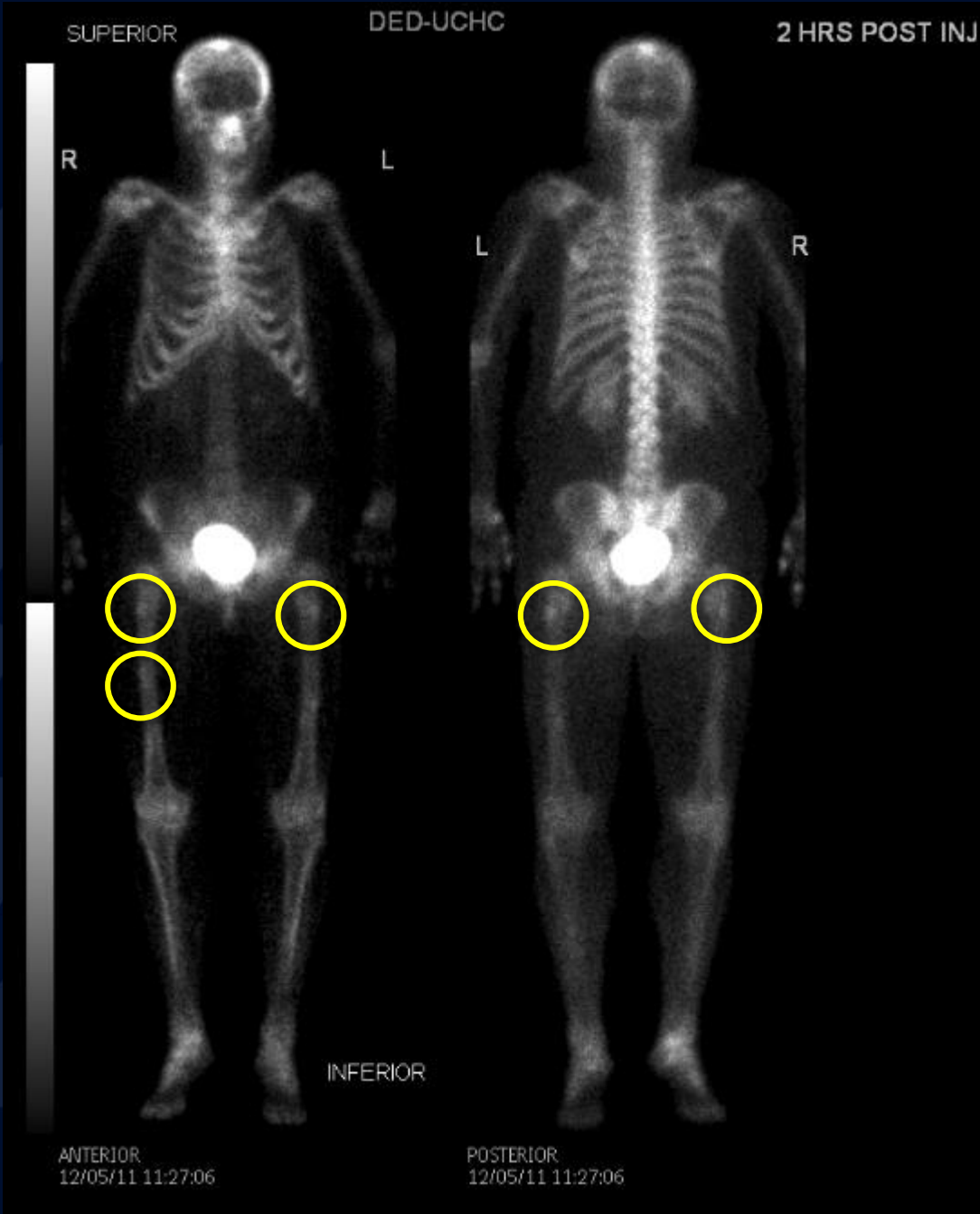


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Bisphosphonate therapy- related proximal femoral fractures

Faint cortical lucencies in area of thickened cortex indicating a stress fracture in setting of increased bone turnover





Bisphosphonate therapy-related proximal femoral fractures

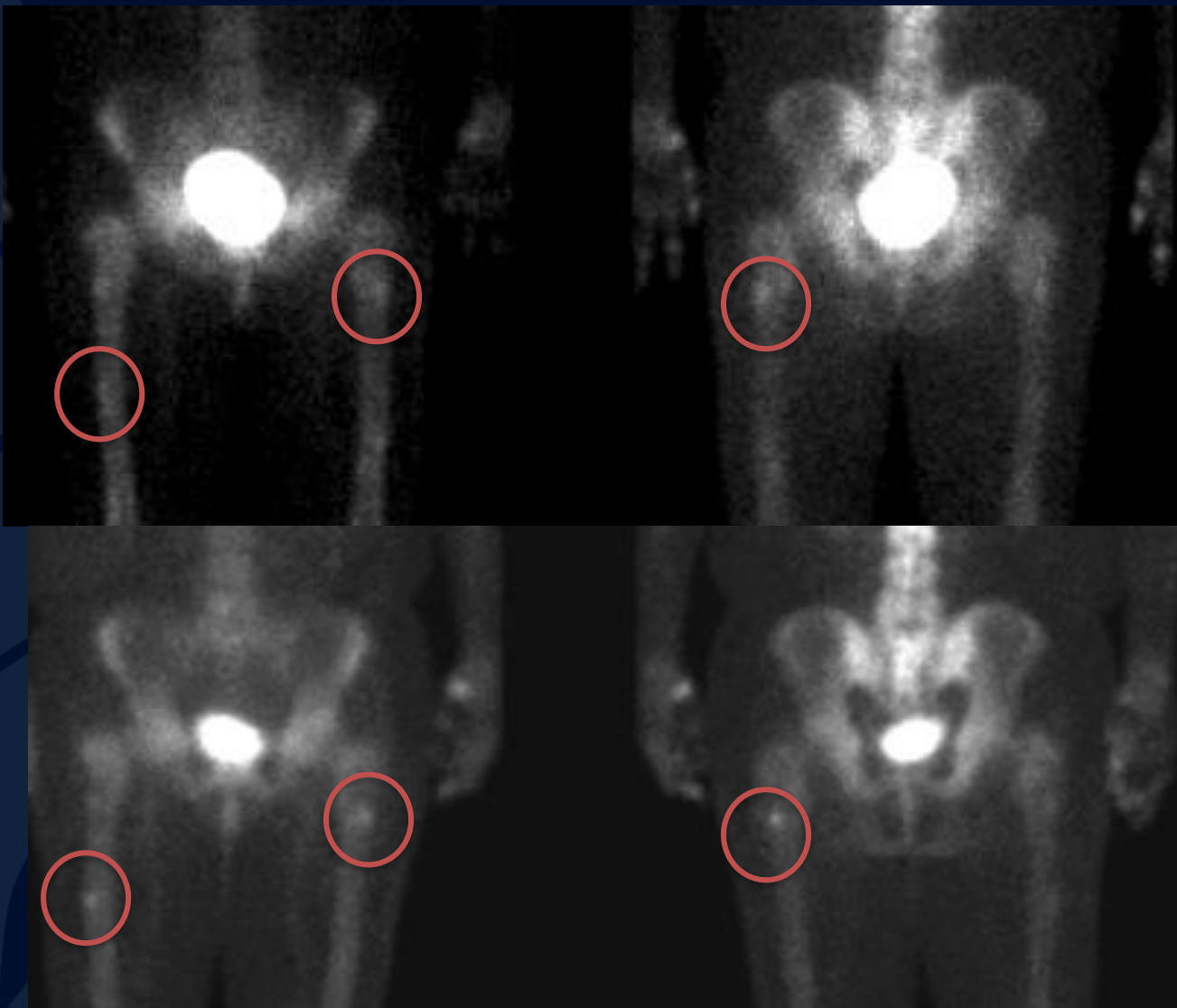
- Type of insufficiency fracture
- Likely related to inhibited bone turnover secondary to osteoclast activity
- Proximal third of femur, typically subtrochanteric
- Uni- or bilateral
- Lateral focal cortical hypertrophy precedes fracture
- Horizontal > obliquely-oriented fracture
- Prophylactic rod fixation may be considered
- Other bisphos complications include osteonecrosis of long bone or jaw (rare)





Follow-up....

This patient underwent prophylactic fixation with an intramedullary rod. There is a fracture along the lateral margin of the subtrochanteric region, presumably related to the surgical procedure.



Faint foci of uptake in the lateral subtrochanteric regions of both proximal femora and of the mid shaft of the right femur are grossly unchanged 6 years apart.

Follow-up....

References

- <https://my.statdx.com/document/bisphosphonates-complications/6d3fc4da-7ad5-4912-9a81-819ff6fecaf9?searchTerm=Bisphosphonate%20related%20proximal%20femoral%20fractures>
- Haworth AE, Webb J. Skeletal complications of bisphosphonate use: what the radiologist should know. *The British Journal of Radiology*. 2012;85(1018):1333-1342. doi:10.1259/bjr/99102700.
- Porrino, Jack A., et al. Diagnosis of Proximal Femoral Insufficiency Fractures in Patients Receiving Bisphosphonate Therapy. *American Journal of Roentgenology*. 2010;194: 1061-1064. 10.2214/AJR.09.3383

Read More: <http://www.ajronline.org/doi/full/10.2214/AJR.09.3383>