

Chapter 124

Focal Decrease in Bone Density



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What are some common causes of focal decrease on bone density (osteolysis)?

Osteolytic metastases, multiple myeloma, and osteomyelitis

What are the entities making up the common acronym for lytic bone lesions, FEGNOMASHIC?

Fibrous dysplasia, enchondromas and eosinophilic granuloma, giant cell tumor, nonossifying fibroma, osteoblastoma, metastatic disease and myeloma, aneurysmal bone cyst, solitary bone cyst, hyperparathyroidism, infection, and chondroblastoma

How can one differentiate metastases from multiple myeloma in the spine?

Metastases in the spine preferentially destroy the pedicles due to high blood supply to this area, while metastases from multiple myeloma tend to spare the pedicle in early disease.

(continued)

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What is the most common primary malignancy of bone in adults?	Multiple myeloma
What is the most common infectious agent causing osteomyelitis?	<i>Staphylococcus aureus</i>
What are common radiologic characteristics of acute osteomyelitis?	(1) Focal cortical bone destruction, (2) periosteal new bone formation, (3) focal osteoporosis from hyperemia, and (4) preferential involvement of joint spaces in adults vs preferential involvement of metaphyses in children due to rich blood supplies
How many days will it take for osteomyelitis to show up on conventional radiograph?	Osteomyelitis can take up to 10 days to show up on plain radiograph; MRI and nuclear bone scans can provide earlier diagnosis.
What are common causes of osteolytic bone metastases?	Lung cancer (most common lytic metastasis in males), breast cancer (most common lytic metastasis in females), renal cell cancer, and thyroid cancer

Further Reading

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