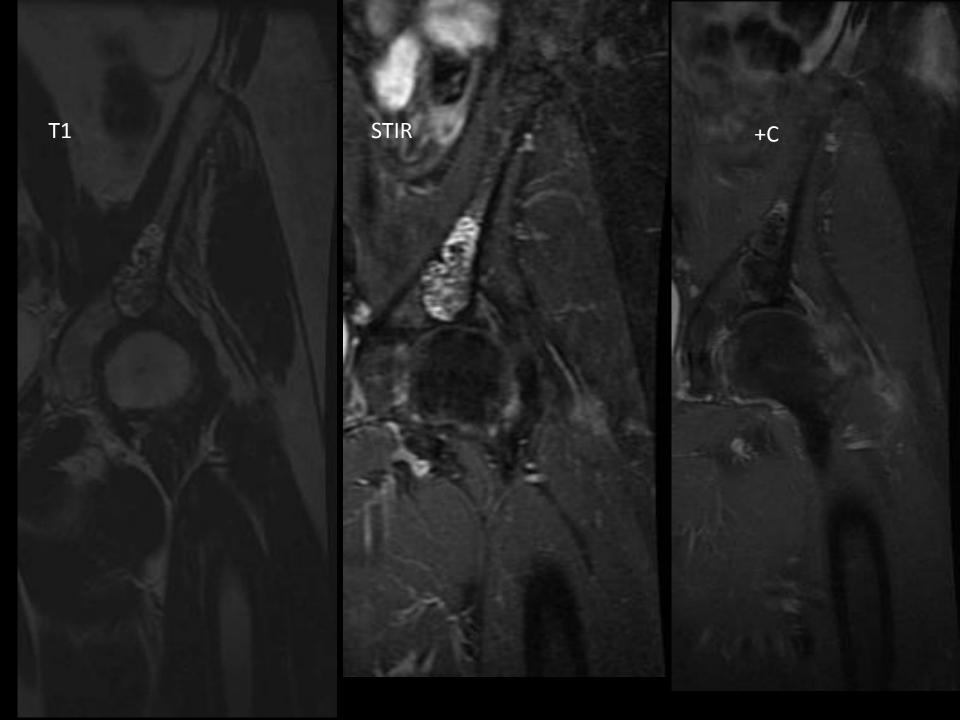
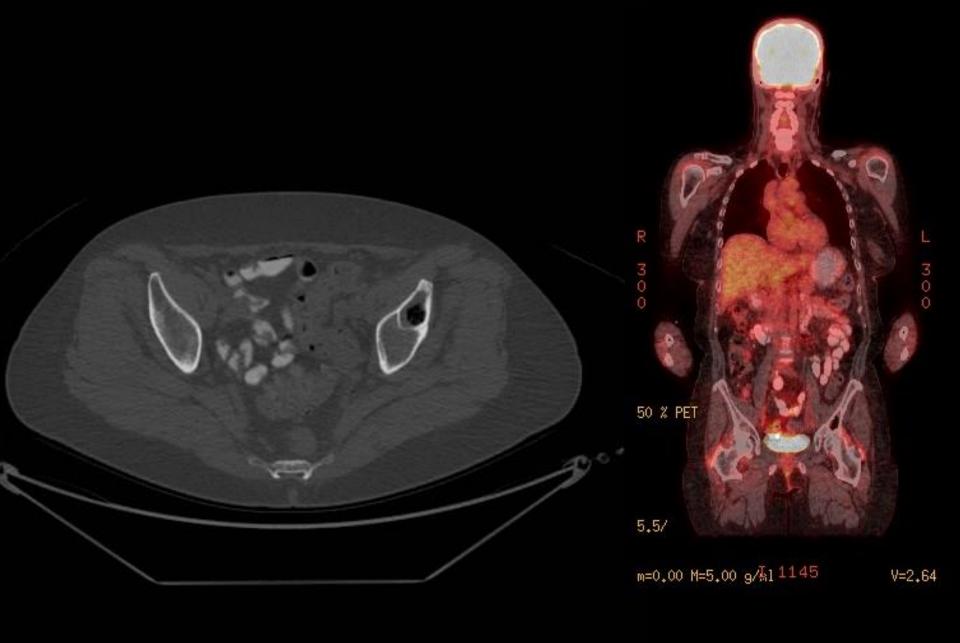
- 63 year old female with hip pain
- PMH: Melanoma





## Subchondral cyst (Geode) containing gas

Geodes are seen in a variety of disorders including:

- Degenerative joint disease (DJD)
- Rheumatoid arthritis
- CPPD
- Avascular necrosis

# Intraosseous gas



**Intraosseous pneumatocyst:** benign, no joint communication, most common in SI joint



## **Open fracture**



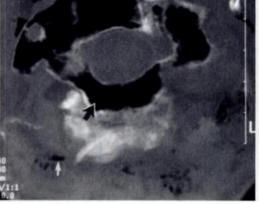


**Osteonecrosis** 

#### Figure 9:

A 76 year-old with recent lifting injury demostrating a subacute posttraumatic burst fracture of T12. Sagittal T1- (9a) and T2-weighted (9b) images reveal the presence of a linear area of low signal (red arrow) suggestive of air within the collapsed and edematous vertebral body. This is known as the intervertebral cleft sign of vertebral osteonecrosis.





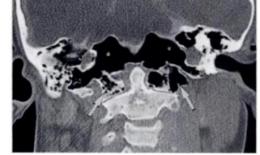


Figure 2. Patient 2. CT scan obtained 5 months after surgery demonstrates extensive pneumatization of the skull base and atlas (arrows).

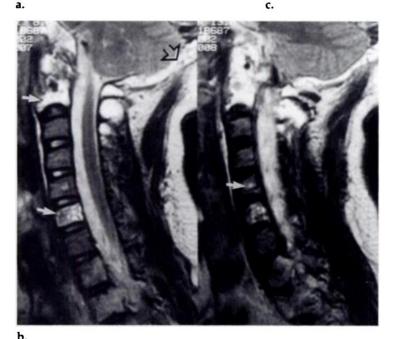




Figure 1. Patient 1. (a) CT scan of the skull base demonstrates extensive intraosseous gas in the sphenoid bone (straight arrows) and occipital bone (curved arrow). (b) Sagittal MR images (3,000/90 effective [repetition time msec/echo time msec]) of the cervical spine show a mottled appearance to the diploë consistent with pneumatosis (open arrow). Abnormal signal intensity is also seen in the axis and C-5 and C-6 vertebral bodies (solid arrows). (c) CT scan of the C-2 vertebral body obtained 3 months later shows complete replacement of the bone marrow cavity with intraosseous gas. The body, posterior elements (large arrow), and transverse processes are involved with lymphangiomatosis. Subcutaneous gas is noted (small arrows).

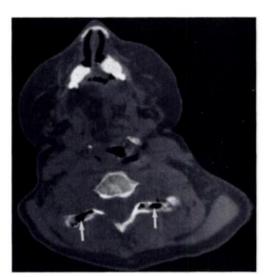


Figure 3. Patient 3. CT scan obtained through the upper thorax confirms intraosseous gas in the transverse processes of T-1 (arrows) that was also seen on radiographs.

#### DISCUSSION

Lymphangiomatosis of bone is an uncommon skeletal disorder. This disease may show a benign course in some pa-

Bone lymphangiomatosis



Necrotizing soft tissue infection-Emphysemato osteomyelitis