CASE OF THE DAY: TUESDAY
#SSRBONE20C0D6

HISTORY

- 44-year-old male
- Painful enlarging masses on upper and lower extremities for 2 years
- Elevated Alkaline Phosphatase
- TSH, PTH, Calcitonin and BMP all normal

DIAGNOSIS

Skeletal Fluorosis

- Rare condition in developed countries
- Excessive fluorine consumption
  - Inhalation of Fluorocarbons (1-difluoroethane)
  - Ingestion of fluorine toothpaste
  - Tea consumption (Camellia sinensis)
  - Fluorine containing medications
- Radiographic findings:
  - Periosteal hyperostosis/periostitis deformans
  - Typically affects the tubular bones of the upper and lower extremities
  - Periosteal nodules-round wavy or multicicular containing striated trabeculae
- MRI findings:
  - Periosteal hyperostosis/nodules
  - Periosteal edema

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