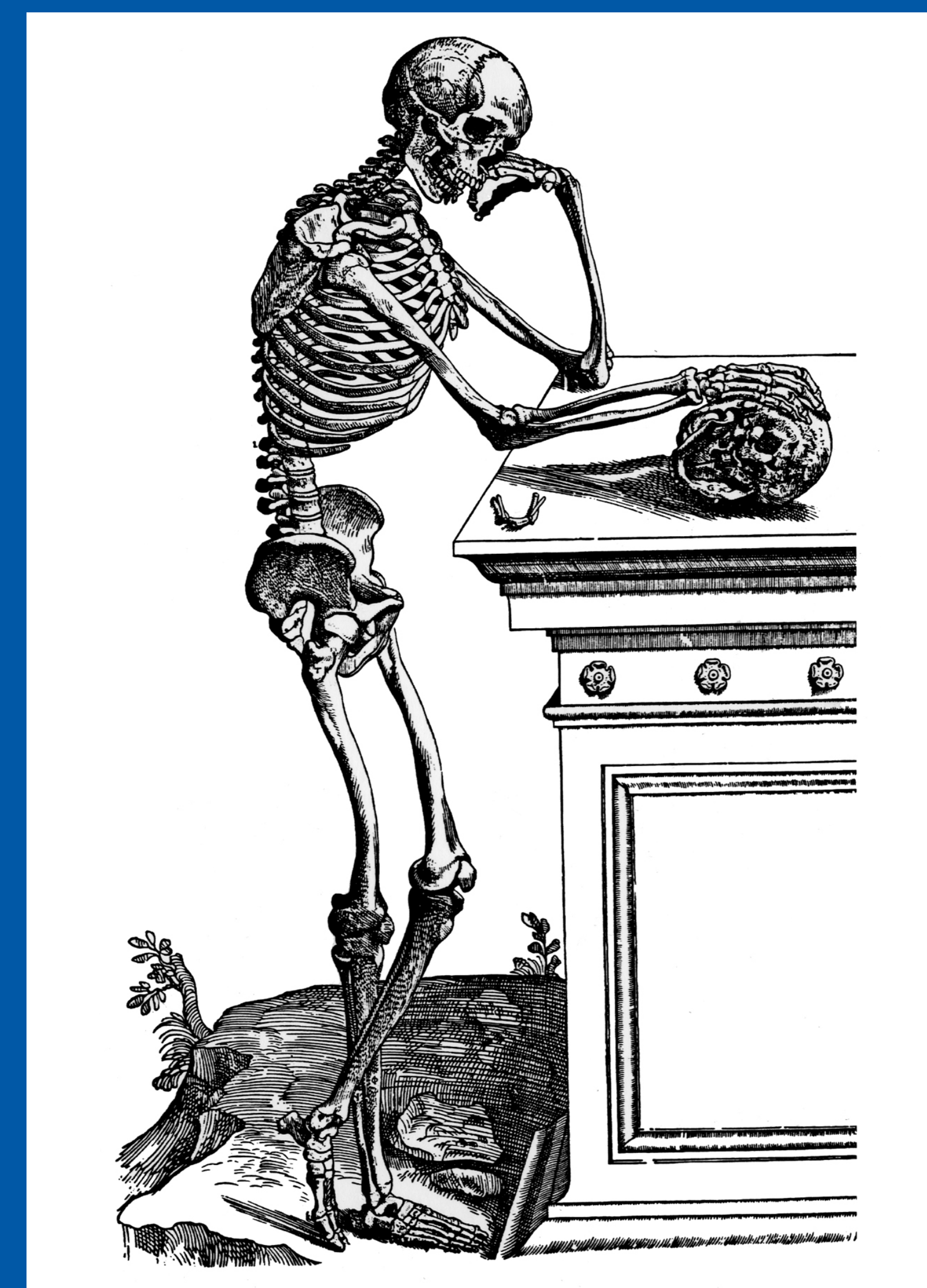


43rd Annual Meeting, Huntington Beach, California Society of Skeletal Radiology

March 29 - April 1, 2020

CASE OF THE DAY: TUESDAY

 #SSRBONE20COD6



MK Jesse, MD; David Gimarc, MD; Colin Strickland, MD
University of Colorado Anschutz Medical Campus, Denver, CO

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 flourine 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

