

Paget's Bone disease: When other comorbidities hide the diagnostic

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Paget's bone disease is a common disorder characterized by focal areas of increased and disorganized bone remodeling affecting one or more bones throughout the skeleton. It preferentially targets the axial skeleton, most frequently affecting the pelvis (70% of cases), femur (55%), lumbar spine (53%), skull (42%), and tibia (32%).¹ Paget's disease is rare before the age of 55 years, but increases in prevalence thereafter, in some countries affecting about 5% of women and 8% of men by the eighth decade of life.¹

¹ Ralston SH. Paget's disease of Bone. N Eng J Med. 2013;268:644-650.

Clinical Case

Seventy eight years old women, with:

- ✓ Hypertension,
- ✓ Dyslipidemia,
- ✓ Type II Diabetes Mellitus,
- ✓ Chronic renal disease

Admitted to our Internal Medicine ward for 7 days due to:

- Acute heart failure caused by pulmonary infection → amoxicillin+clavulanate for 8 days

During hospitalization:

-patient complained from bone pain

❖ **Blood analysis:** Alanine aminotransferase: 15 U/L; Aspartate aminotransferase 41 U/L; Alkaline Phosphatase 324 U/L (without other alterations)



❖ **Abdominal ultrasound:** "(...) semi enlarged gallbladder, with normal wall, three nodular formations (8mm maximum), medium echogenicity, compatible with cholesterol polyps."

Outpatient consultation

»» **Persistent cholestasis** (new blood analyses)

Magnetic resonance cholangiopancreatography



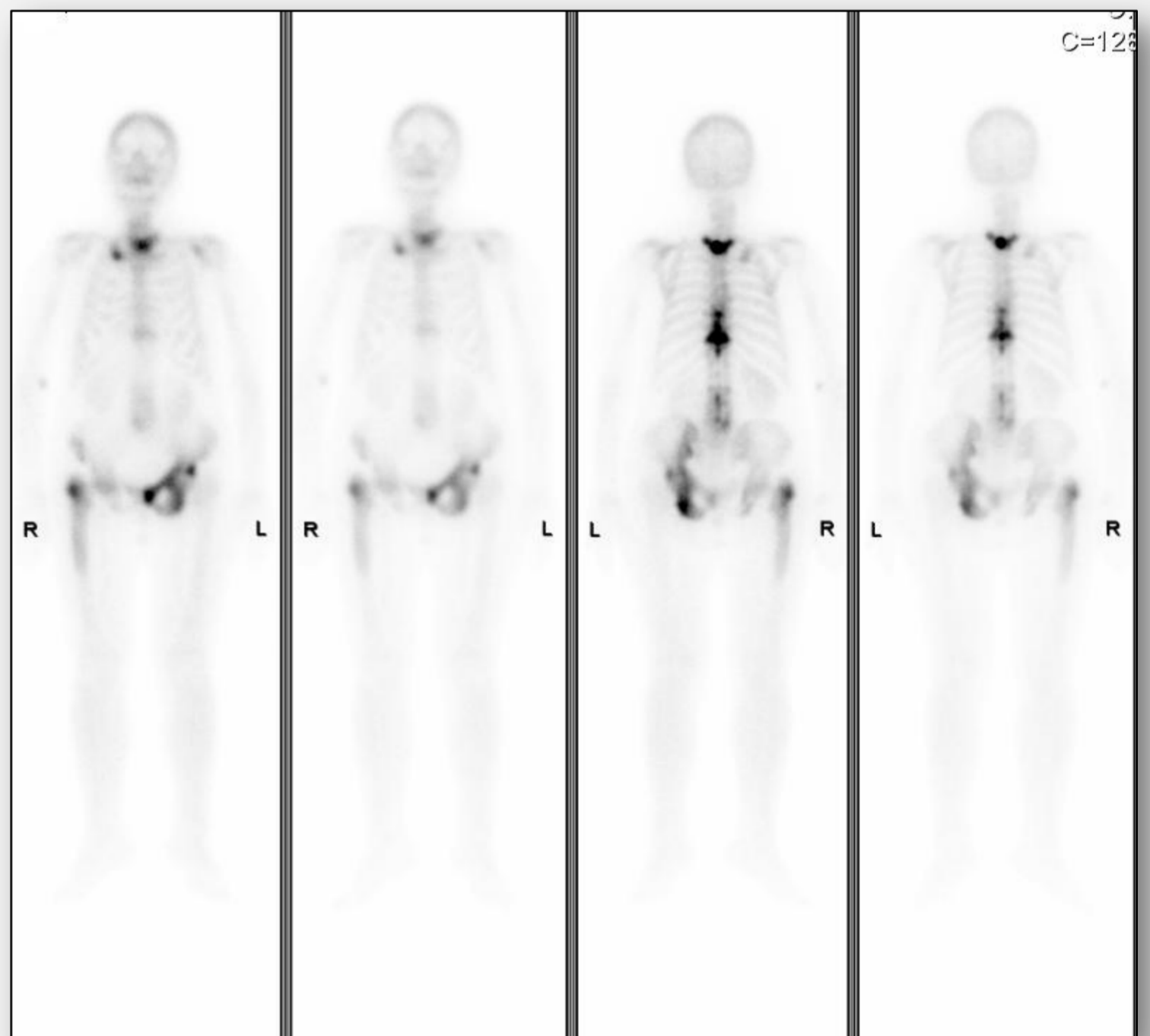
Nothing was found



➤ New blood analysis:

Total Calcium 9,3; Phosphorus 3,8; Alkaline Phosphatase 430 (increased since last control) **urinary hydroxyproline 60,70/24h**

Treatment rapidly implemented »»»» **Alendronic acid**



Clinical evidence compatible with **Paget disease**, with involvement of several dorsal and lumbar vertebrae, first right costal arch, left scapula, pelvis and right femur

Conclusion

The relevance of the case relates to the need to alert clinicians to the importance of integrated the symptoms and signs with changes detected in the diagnostic tests. Only then it is possible to direct the investigation to obtain precise etiological diagnosis. Regarding this clinical case, only through undertaking a precise research was possible to identify the elevation of the FA presented, as well as to verify that the osteoarticular complaints were not due to degenerative bone disease but due to Paget's Bone Disease, allowing adaptation of therapeutic approach and consequent improvement of patient's quality of life.