INCIDENT FRAGILITY FRACTURES UNDER ANTIRESORBTIVE THERAPY IN A 76 YEAR OLD LADY: NEVER TOO LATE TO DISCOVER NEW CAUSES

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Pathologic antecedents:

- Atrial fibrillation
- Hypertension
- Severe osteoporosis (antiresorbtive treatment with Bisphosphonates in the last 2 years)
- Raynaud's syndrome
- Amiodarone induced autoimmune hypothyroidism currently under treatment with L-Thyroxine

C.M, 76 years old female

Motives of admission

•the evaluation of antiresorbtive therapy in the context of a recent rib fracture after coughing

Clinically:

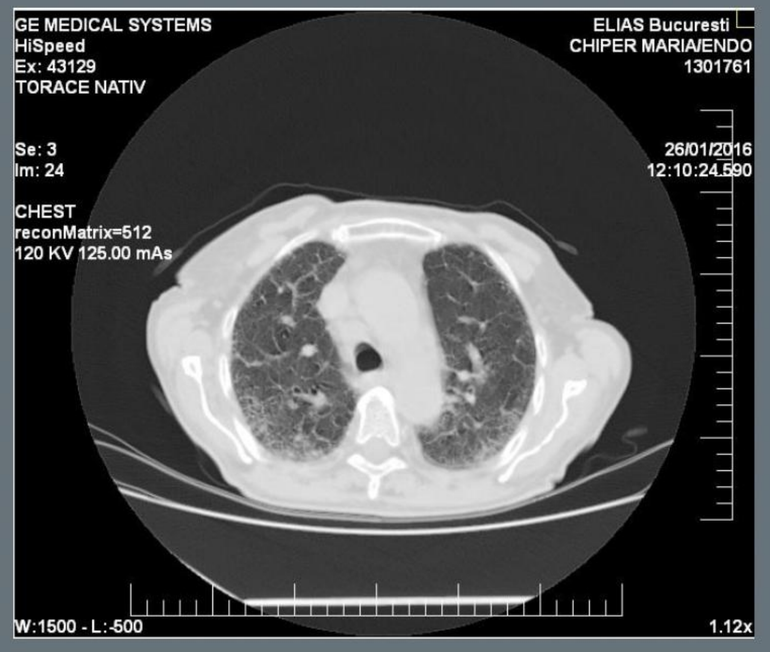
- Normal BMI of 19.5kg/m2
- Kyphosis with loss of more than 5 cm of height in the last 5 years with a height of 148cm
- Raynaud's syndrome with inflammatory signs of the hands
- Left bronchial rales
- BP of 110/70mmHg with a HR of 125/min.

Biologically:

Blood test	Value	NormalValue
ESR	36mm/h	3-13mm/h
Calcium	9.6mg/dl	8.8-10.2mg/dl
Phosphorus	3.9mg/dl	2.5-4.5
iPTH	25pg/ml	15-65pg/ml
25OH vitamin D	31ng/dl	30-100ng/dl
TSH	5.50mcUI/ml	0.3-4.2mcUI/ml

- DXA : lumbar T score: -2.8DS, femoral neck T score: -2.9DS
- Chest X-ray: 4th rib fracture, pulmonary fibrosis and a T9 and T10 vertebral fracture

Chest CT: confirmed the pulmonary fibrosis, the rib and vertebral fractures and raised the suspicion of systemic sclerosis



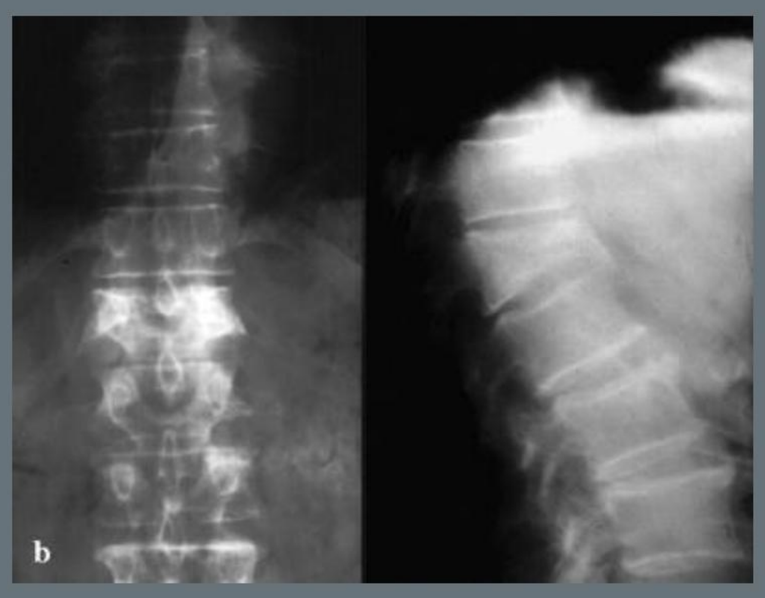


Fig 1 - a: Chest CT -pulmonary fibrosis, b: chest X-ray- T9 and T10 vertebral fracture

Diagnostic

- Severe osteoporosis with multiple fragility fractures
- Systemic sclerosis confirmed by the anti SCL70 antibodies
- Amiodarone induced autoimmune hypothyroidism currently under treatment with L-Thyroxine
- Atrial fibrillation
- Hypertension

Treatment :

-indication for Teriparatide

-due to the newly increased fracture risk - the systemic sclerosis and incident fracture under antiresorbtive treatment

Conclusion:

The pathogeny of severe osteoporosis, in our case, revealed new findings after less than 2 years of treatment: besides advanced age and possible effects of L-thyroxine replacement therapy we discovered that the established negative effects of the systemic sclerosis on the skeleton revealed the need for a complete reevaluation during follow-ups for osteoporotic patients