



# ERYTHEMA NODOSUM: ATYPICAL PRESENTATION OF A COMMON DISEASE

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# Clinical case

Female, 58 anos  
Retired

Primary care doctor:  
Levofloxacin +  
Enoxaparin

ER HUC

D7

Admission

D3 Persistence of symptoms

D1

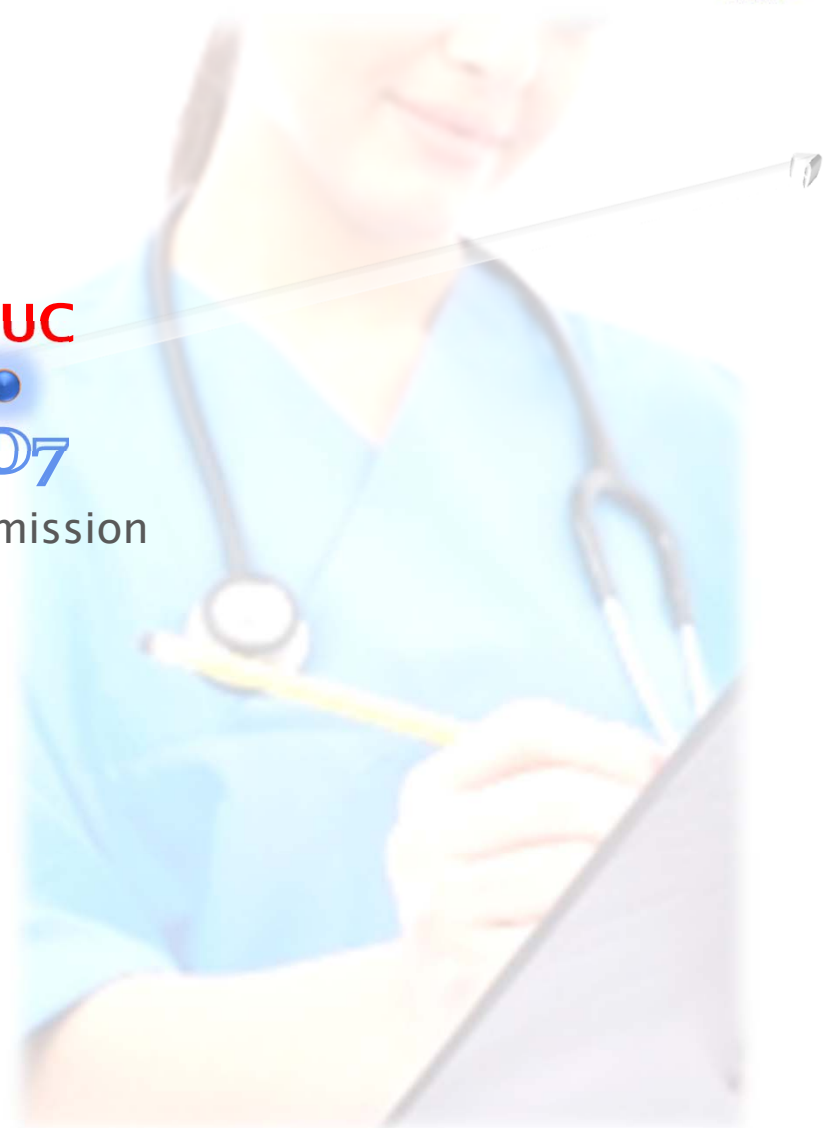
## Fever

- max 38°C
- ++ in the evening

## Nausea

## Subcutaneous nodules

- painfull
- Extensor surface of both legs



# History

## Medical History

- Cholecystectomy (2000)

## Medication

- None

## Allergies

- No known

## Family History

- Noncontributory

## Social History and lifestyle

- Pets: dog
- Contact with mice urine while cleaning a warehouse
- Denied ingestion of raw food or unpasteurized milk or cheese
- Never smoked or used illicit drugs; drinks alcohol at social gatherings
- No recent travel

# Physical examination

Alert and oriented. Distressed.

Temperature: **37.8°C**

Blood pressure: 130/80    Heart rate: 95bpm

SatO<sub>2</sub>: 98%

Regular heart beat, no murmurs or rubs.

Breath sounds clear in both lungs, no wheezing or crackles

Abdomen: soft, nondistended, bowel sounds audible, no hepatosplenomegaly

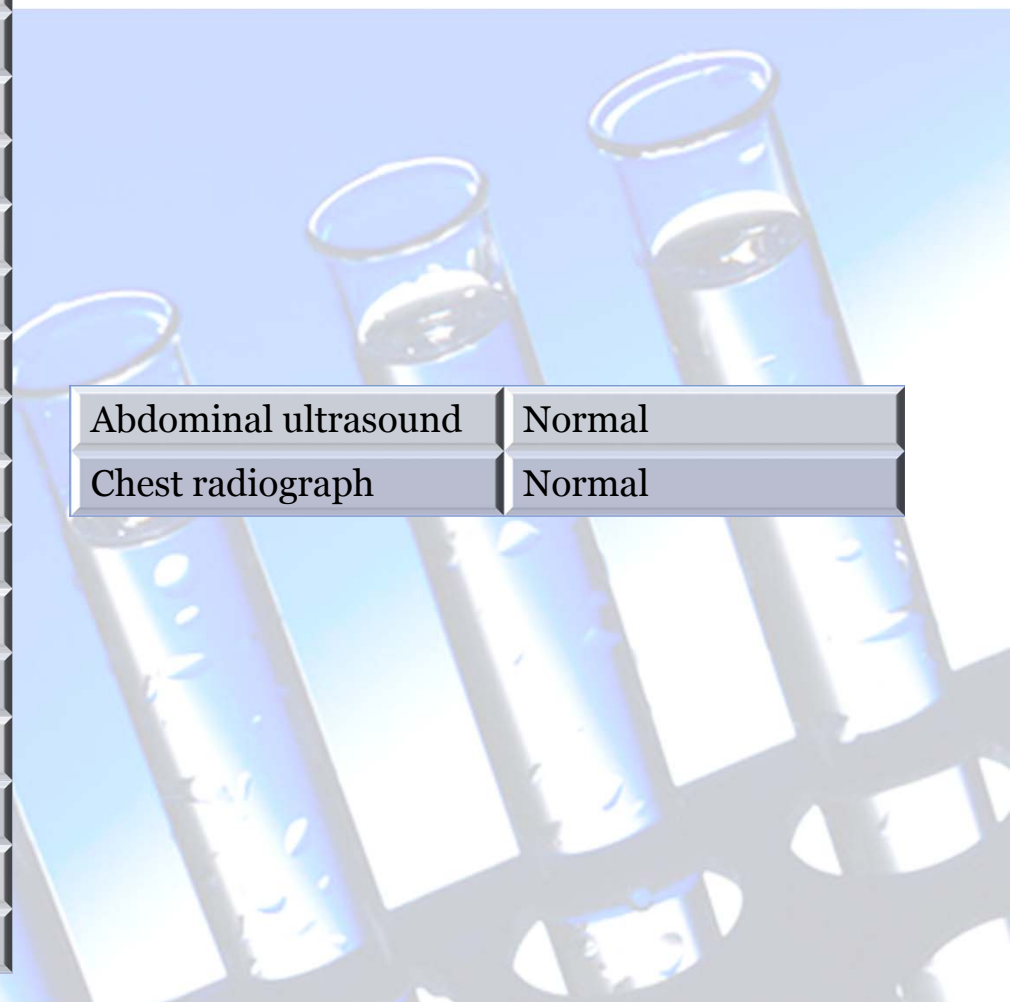
Discrete edema in legs (++) left)

**Pretibial red subcutaneous nodules**

# Laboratory and imaging tests -ER

	D7 (ER)
Hemoglobin (g/dL)	13.0
White cell count(x10 <sup>9</sup> /L)	8.1
Platet count (x10 <sup>9</sup> /L)	304
INR	1.20
ESR (mm/h)	<b>67</b>
Creatinine (mg/dL)	0.78
Proteins (g/dL)	7.7
Albumine (g/dL)	3.7
CRP (mg/dL)	<b>6.48</b>
LDH (U/L)	228
AST (U/L)	<b>36</b>
ALT (U/L)	<b>63</b>
ALP (U/L)	<b>160</b>
GGT (U/L)	<b>100</b>
Bil. T (mg/dL)	0.4

Abdominal ultrasound	Normal
Chest radiograph	Normal



# Diagnostic hypothesis

- Leptospirosis
- Viral infection
- Sarcoidosis
- Tuberculosis
- Streptococcal infection
- Lymphoma

**Fever**  
+  
**Erythema nodosum**  
+  
**Elevated sedimentation rate**  
+  
**Elevated liver enzymes**

# Case presentation

Female, 58 anos  
Retired

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ER HUC

D7

Admission

Doxiciclin

D10

Persistence of  
fever

Naproxen

D15

D17

No fever

D1

D3

Persistence of  
symptoms

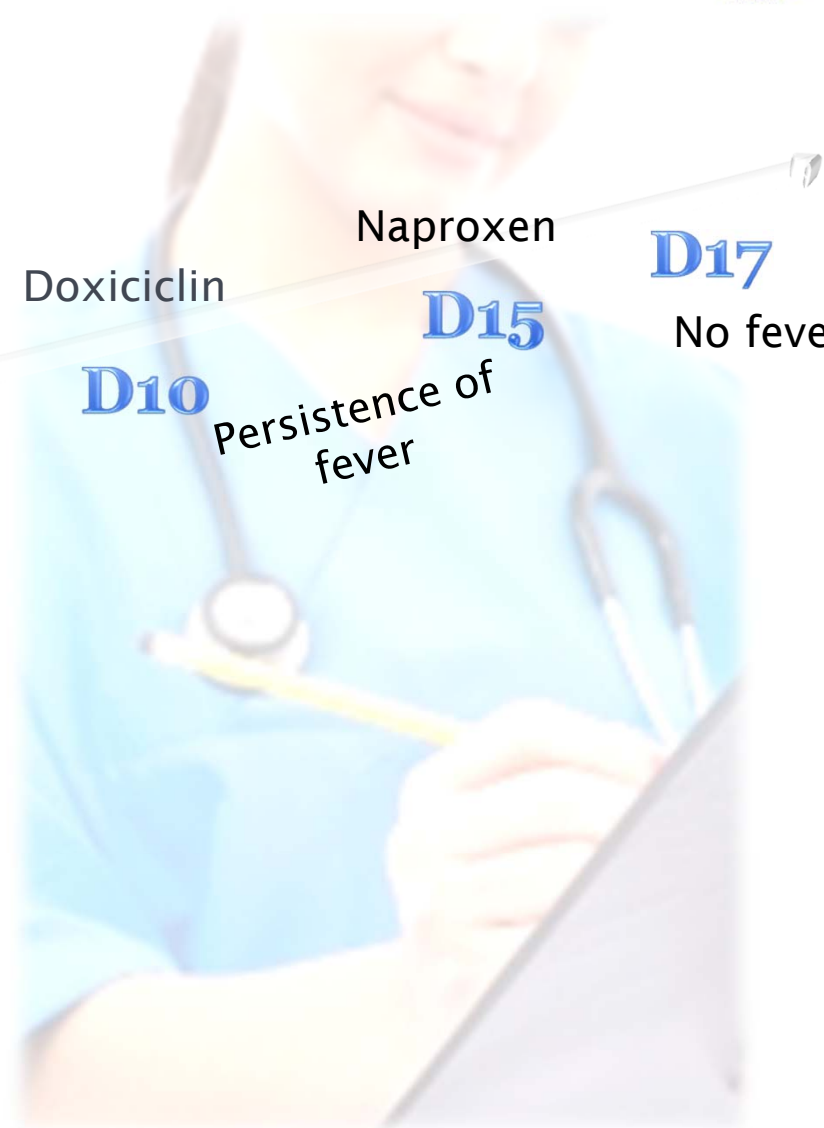
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# Laboratory tests

Ferritin	Normal
Protein electrophoresis	Normal
SACE	<b>54 U/L (N&lt;52)</b>
Lymphocyte populations	Normal
B2-microglobulin	Normal
ANAs	<b>Positive (+++) no specific pattern</b>
Anti ds-DNA antibodies	<b>4.6 IU/mL (N&lt;4.2)</b>
C3, C4	Normal
Antistreptolysin O antibody titer	Negative



# Laboratory tests

Serologies	HBV, HCV, HAV, HIV <sub>1/2</sub>	Negative
	CMV, EBV	Imune
	Coxiella burnetii	Negative
	Brucella	Negative
	Borrelia burgdorferi	Negative
	Leishmania	Negative
	Rickettsia conorii	Negative
	Leptospira interrogans	<b>Direct exam: negative</b> <b>Serology: Positive (serovar: Castellonis- 100)</b>
Tuberculin skin test	Negative	
Blood cultures, including BK	Negative	
Urine culture	Negative	

## Slide 9

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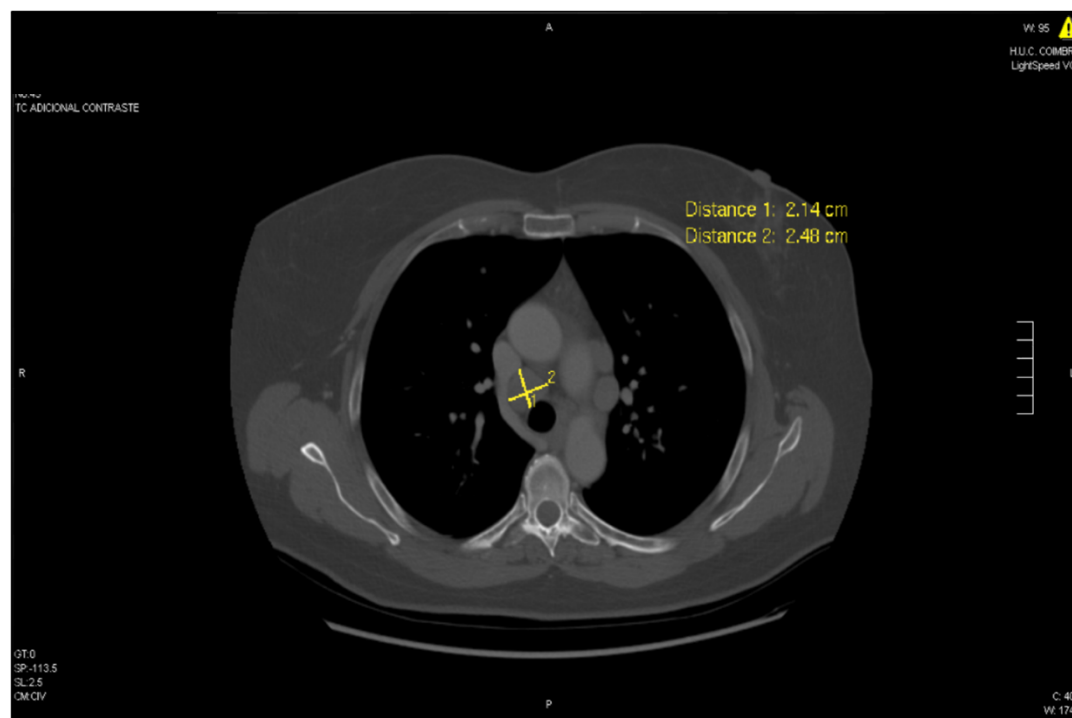
**emilialou2** Rickettsia junto das hepatites?

emilialouro@gmail.com; 14.01.2013

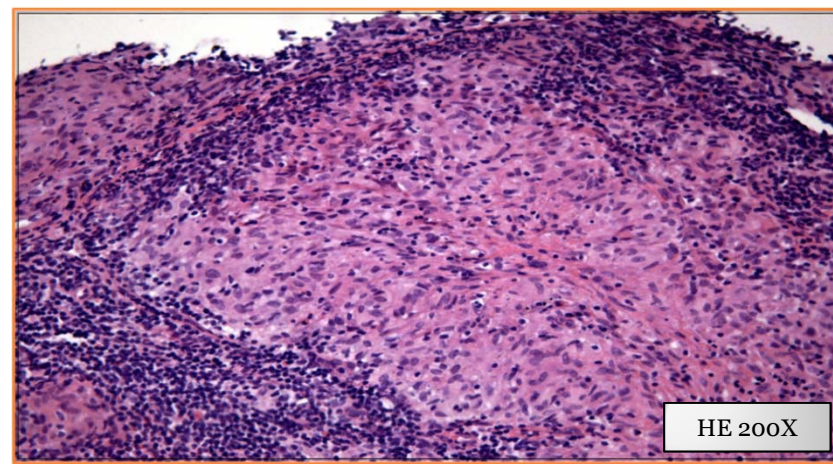
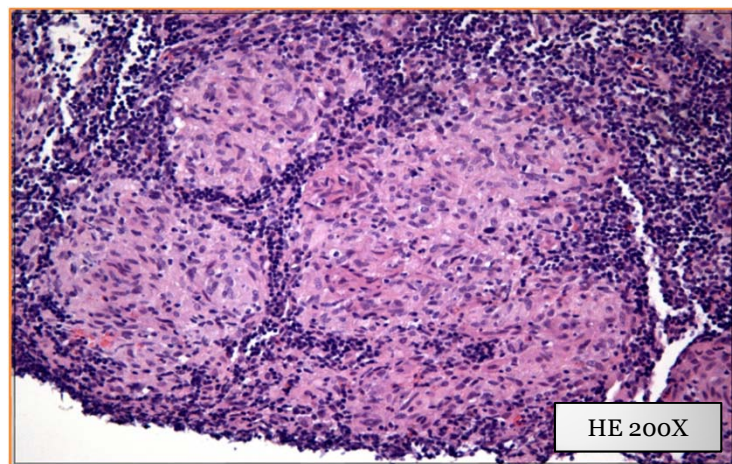
# Imaging tests

## Thorax CT

**Mediastinal and hilar lymphadenopathies and millimetric nodules in both superior pulmonar lobes and left inferior lobe**



# Further tests...



<b>Biopsy (mediastinoscopy)</b>	<b>Epithelioid granulomas with discrete necrosis— tuberculosis in immunocompromised patient?</b>
<i>PCR Mycobacterium tuberculosis</i> (lymph node)	<b>Negative</b>
BK culture (lymph node)	<b>Negative</b>
Broncho alveolar lavage	<b>Normal</b>

# Treatment

- |  | <i>Initial phase</i> | <i>Continuation phase</i> |
|--|----------------------|---------------------------|
| <ul style="list-style-type: none"><li>• Isoniazid</li><li>• Rifampicin</li><li>• Ethambutol</li><li>• Pyrazinamide</li></ul> | 2 months             | 7 months                  |



# Take home messages

- Erythema nodosum:
  - incidence: 1 to 5/100,000 persons, ++ women 15 - 40 years
  - the majority of patients have:
    - evidence of recent streptococcal infection or no identifiable cause
  - in 15-40%: early sign of infections, connective tissue diseases and other inflammatory disorders
    - The frequency of these associations changes with the population studied
  - EN is usually self-limited or resolves with treatment of the underlying disorder.
- Currently, the prevalence of TB among patients presenting with EN has decreased markedly
  - However, regarding the importance of its treatment, this diagnosis should always be suspected.