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Background: Lead poisoning has been reported infrequently in recent years in developed countries due to the implementation of legislative measures aimed at reducing environmental lead. The few cases that appear correspond mainly to occupational exposure.

Purpose: To describe the therapeutic management in a case of chronic lead poisoning

Material and methods:

•Male
•53 years
•Dedicated to the exploitation of leas in abandoned mine

Back ground:
dyslipemia,
30 cigarettes/day

He goes to
internal
medicine for

Joint pain
Dyspnea minimum-moderate efforts
Asthenia and dysthermina sensation
Scarce cough
Dar k urine
Abdominal pain
Nausea
Vomiting
Unquantified weight loss

Initial Analysis	
Hemoglobin (Hb)	8.2 g/dL
Hematocrit (Ht)	25,1%
Peripheral blood smear	smear with anisocytosis, rounded red spherocyte-like cells, element with basophilic stippling
Plasmatic Creatinine (Cr.)	0.67 mg/dL
Glomerular filtration	109.7 ml/min/m ²
Urobilinogen in urine	8 mg/dL
Blood Lead	946 µg/dL
Urinary lead excretion	2024 µg/24h

Diagnosis: HEMOLYTIC ANEMIA FOR LEAD POISONING

Results:

Pharmacist

Due to:

- Few cases with lead blood levels above 100µg/dL in the literature
- No neurological symptoms despite higher than 900µg/dL

Internal Clinic

Conservative approach and hospitalization for chelation therapy:

Dimercaprol IM 200 mg

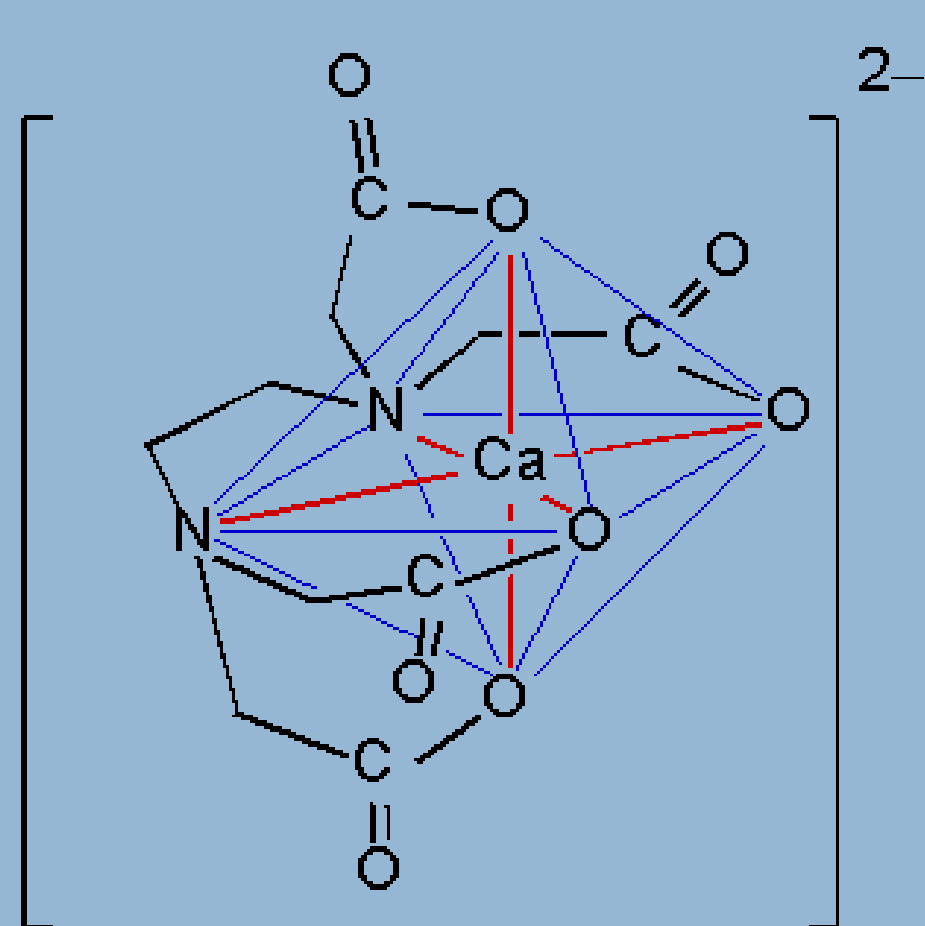
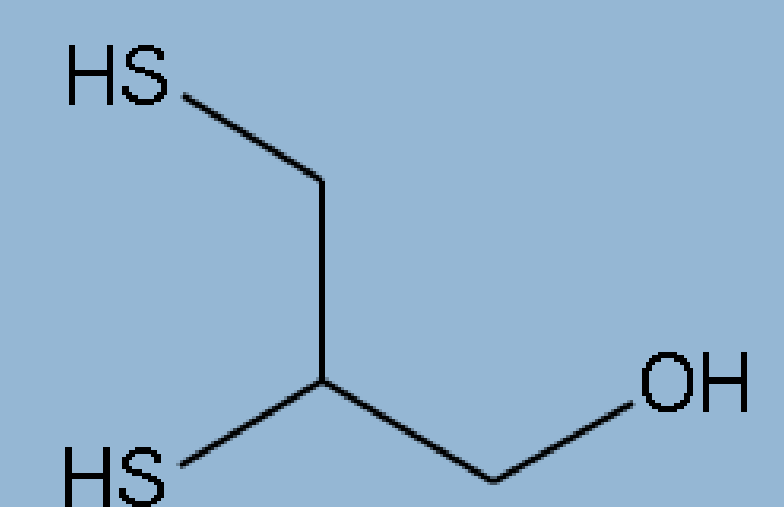
(every 4h days +1,+2 ; every 6h days +3, +4 and every 12h day+5)

EDTA calcium 1500mg every 12h

(administered for 6h) (first dose administered 4 h after Dimercaprol IM)

Premedication

Dexchlorfeniramine 5mg IV every 8h
500mL Bicarbonate 1/6M every 12h



Clinical course was **satisfactory**, without deterioration of renal function and no complications

During treatment	+1	+2	+3	+4	+5	+6	+7
Hb (g/dL)	7.6	9.6	10.9	8	9.1	8.6	9
Ht (%)	23.1	29.1	32.9	24.5	28.5	25.3	27.7
Cr (mg/dL)	0.59	0.84	0.55	0.71	0.48	0.54	nd

One month after the chelating treatment:
Blood lead: 70 µg/dL
Urinary lead excretion: 162 µg/24h

Conclusions:

- Chronic lead poisoning is unusual.
- Pharmacological management is generally little known and the literature does not reach a clear consensus, requiring a multidisciplinary team.
- Pharmacists play an essential role in acquisition, management, dispensation and validation of the treatment, in order to achieve the therapeutic goal in the shortest time and with an optimum result.