



CHMA

Centro Hospitalar do Médio Ave, E.P.E.

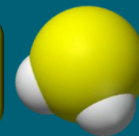
FALL IN SEWER...

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Serviço de Medicina I
Centro Hospitalar Médio Ave Unidade de Famalicão

Personal data and admission cause



JSP, 57 yo, ♂

Hog farms worker

Admission cause:

Dyspnea, caught and and hemoptysis

History of Present Illness:



Day 0

Sewer leak: inhalation and skin contact, faint

After 6h: sudden dyspnea, caught, hemoptysis and chest pain.



Dizziness and weakness

Day 1

Arrives to the hospital

Past medical history



No previous relevant diseases

No previous medication

Unknown allergies

Physical Examination



Really bad smell

Awake. Cooperant.

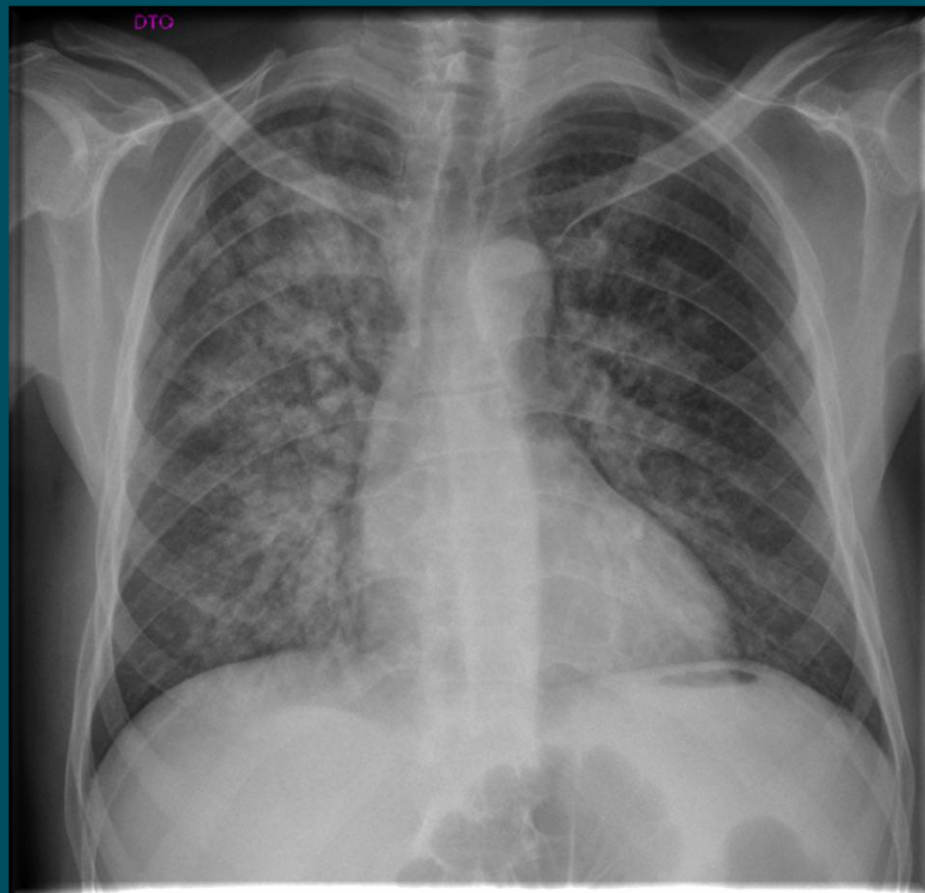
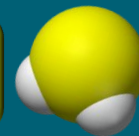
RRate= 36 cpm Temp.= 36,2°C AP=109/74 mmHg

HRate= 110 bpm SatO2(FiO2 21%): 91%

CA= S1 e S2 + rythmic.

PA= com. Rales in inferior 1/2 torax.

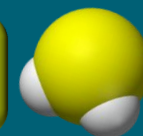
Normal summary neurologic exam



Art. Blood Gas (21%)

pH	7.45	7.35-7,45
Pco2 mmHg	28	35- 45
pO2 mmHg	57	80-100
SO2 %	91	>95
HCO3 mmol/L	19.5	22-26
Lact. mmol/L	3.7	0.5 2

ECG | **SR.** HR 129 bpm. ST elevation DI-III, aVF, V3/6



Hb	17.6	13-18 g/dL	CK	2281	38-190 U/L
Plat.	422 000	130-450x10 ³ /uL	CK-MMB	176.9	7-25 ng/mL
Leuk.	46,200	4-10 x10 ³ /uL	TropI	24.58	<0.1 ng/mL
Neut.	94,1(43)	2,8-7,5 x10 ³ /uL	Miog.	3131	28-72 ng/mL
			Creat.	1.6	07-1,2 mg/dL
			Urea	120	17-50 mg/dL
PT	16.3	8-14 seg.	TGO/AST	213	<38 U/L
APTT	40.8	25-35 seg.	Na	139	135-145 mEq/L
INR	1.54	-	K	4	3.5-5 mEq/L
			Cl	101	98-107 mEq/L
			CRP	17.66	<0.3 mg/dL



PROBLEMS



TREATMENT



**Acute Lung Injury
Pneumonia/Pneumo
nitis**

SIRS

Cardiac

(Ischemia/Miocarditis)

Hepatic

Renal

Muscle



Fluid

Oxygen

Antibiotic

Antiplatelet drug

Corticoid

PPI

Non Inv. Ventilation



Echocardiogram (D1)

Left chambers dilation. Left ventricular function severely depressed. Global hypokinesia

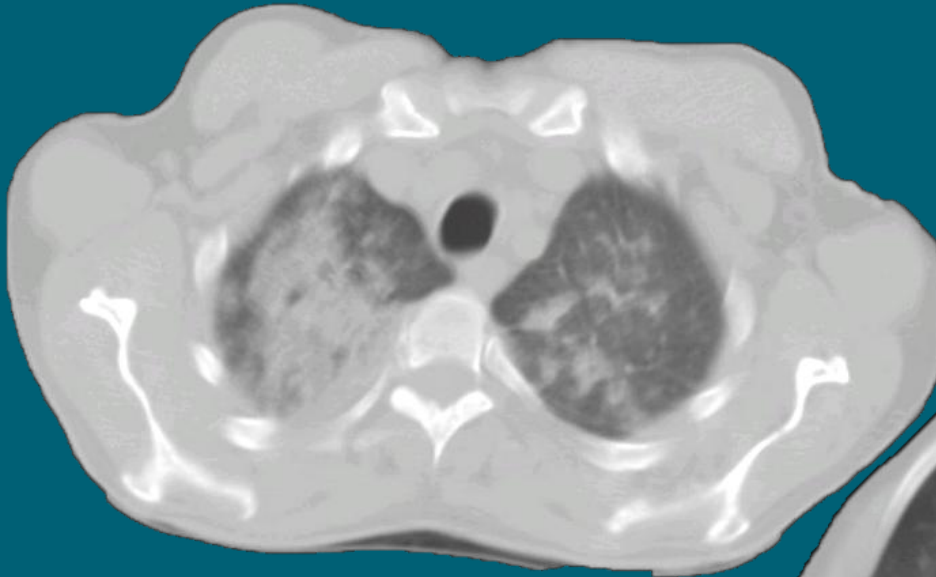
- **Low grade** mitral and aortic Insufficiency.

EF=30%

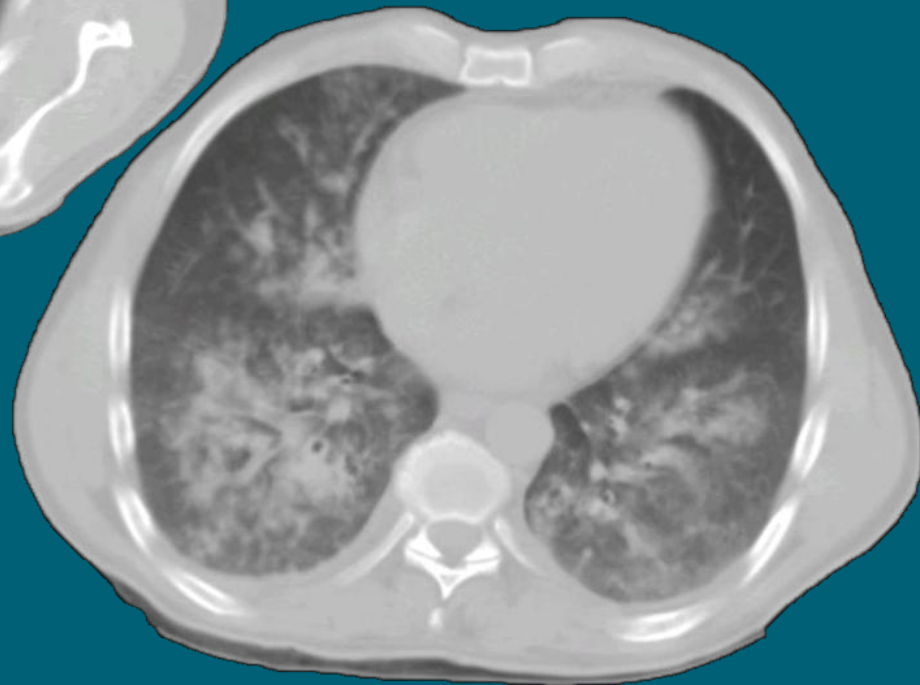
Blood Culture
Sputum Culture



Thorax CT scan (D1)



“...difuse ground glass pattern, peribronchovascular infiltrate...”





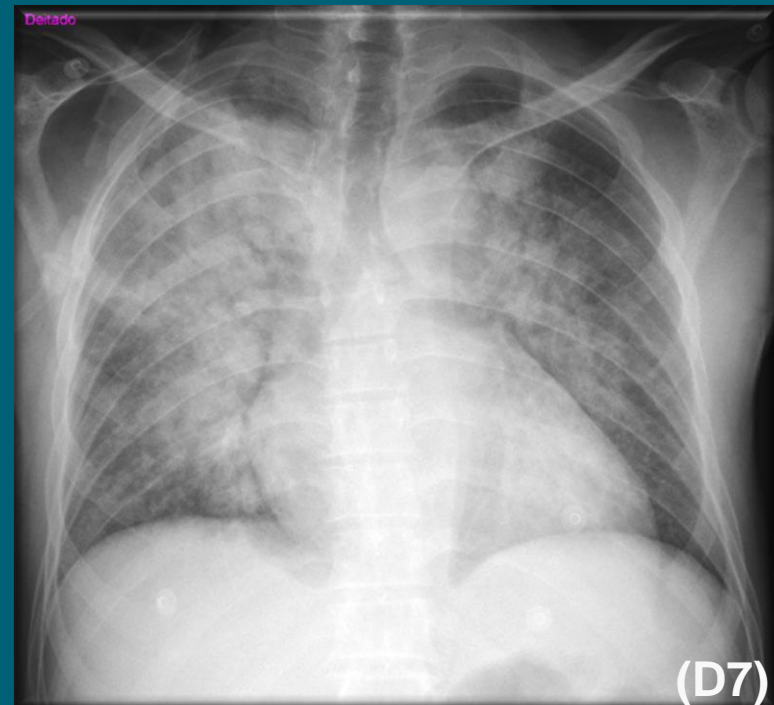
ECOCARDIOGRAMA

(D7)

Left ventricular function
severely depressed. Global
akinesia . **Medium/High grade**
mitral Insuficiency
Low volume pericardial
effusion
EF de 30%.

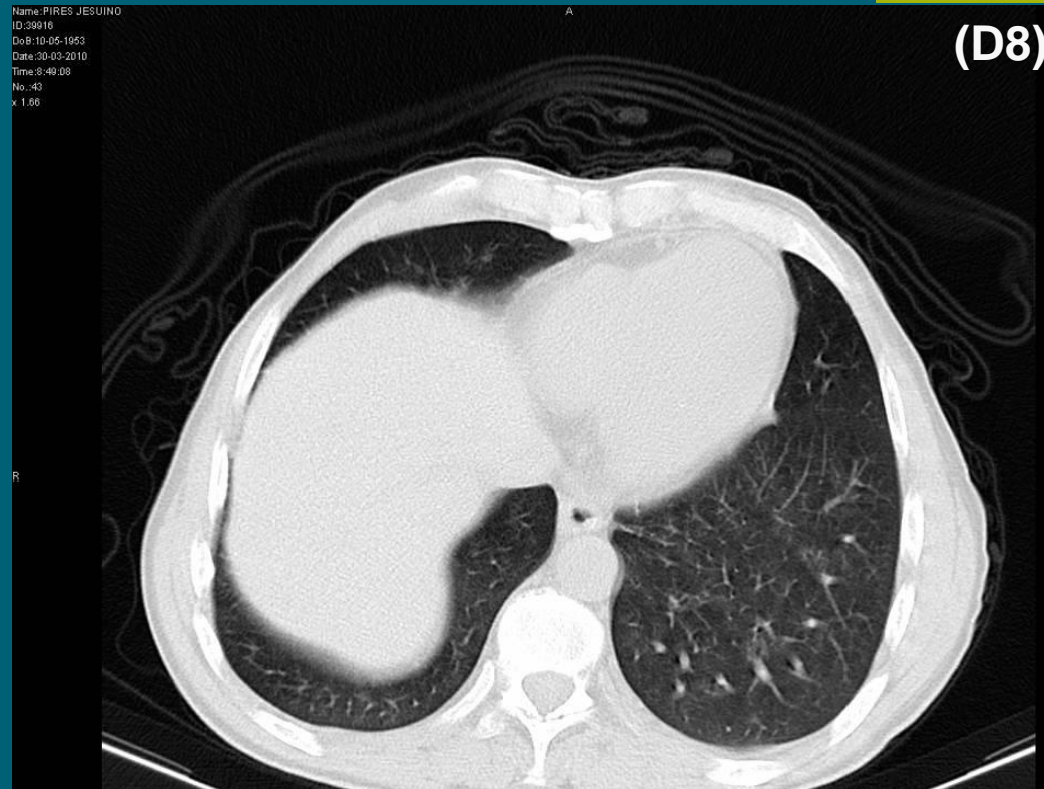


Thorax X-ray





Thorax CT scan



“... “...diffuse ground glass pattern...”

” ... right lower lobe there is a modularity with air bronchogram (24 mm)...”

Hydrogen Sulphide Poisoning



Epidemiology

USA (2007) 1134 cases reported. 13 deaths

Basics

Inhibition of oxidative phosphorylation in the mitochondria . Irritant

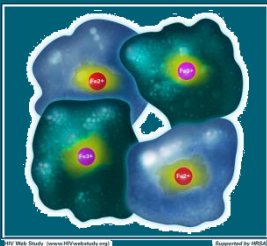
Symptoms

Irritant symptoms, consciousness loss, ARDS

Treatment

Support

O₂ hiperbáric/Sodium Nitrite(NaNO₂)





Improved arterial blood sample gas values up to respiratory
insufficiency full recover
Normalized values of previous altered blood tests

D12

Outpatient /Follow-up in Internal Medicine consult
Hydrogen Sulphide Poisoning and Heart failure

Medicação:

Prednisolone + Carvedilol + Perindopril + Acetylsalicylic acid + Ranitidin



Echocardiogram

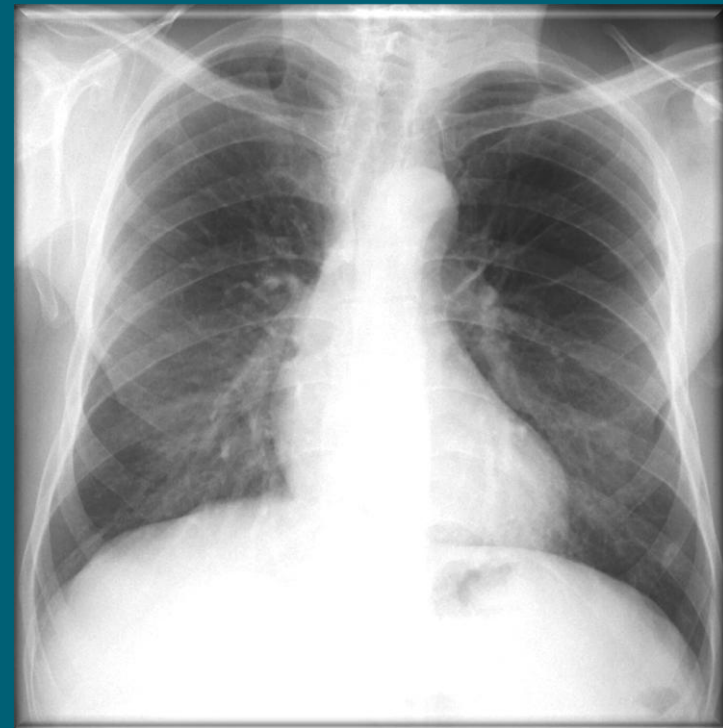
Low grade mitral and aortic
Insufficiency

Left ventricular function
preserved.

EF = 60%.



Thorax x-ray



Myocardial perfusion
scintigraphy

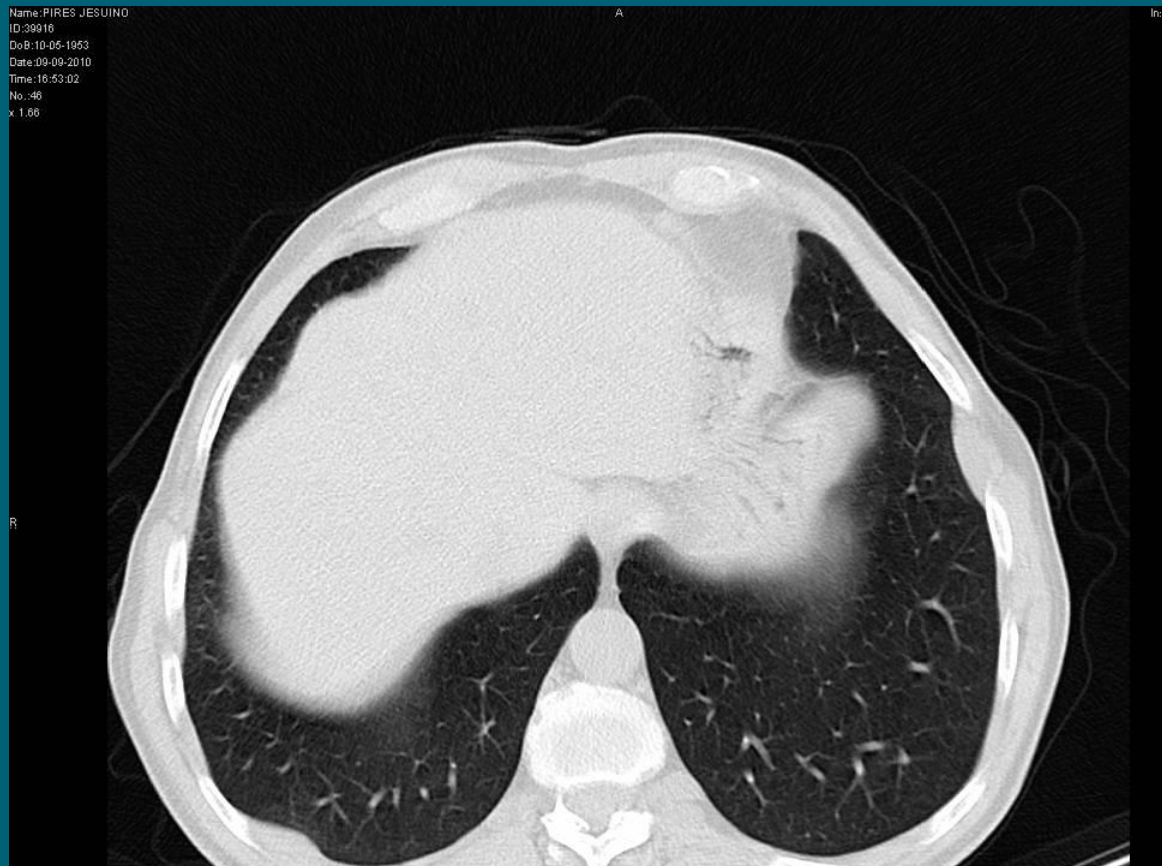
No signs of ischemia.

EF = 50%.

Follow-up – 3months



Thorax CT scan





**History match sulphide hydrogen poisoning
(falling sewer pipe line accidents)**

Initially few symptoms

Keep monitoring

Be aware of ARDS

Mortality in first days otherwise good recovery



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HYDROGEN SULPHIDE POISONING