

# Educational Programme on Transplant Infectious Diseases

Illustrative clinical case

## Prevention is better ...

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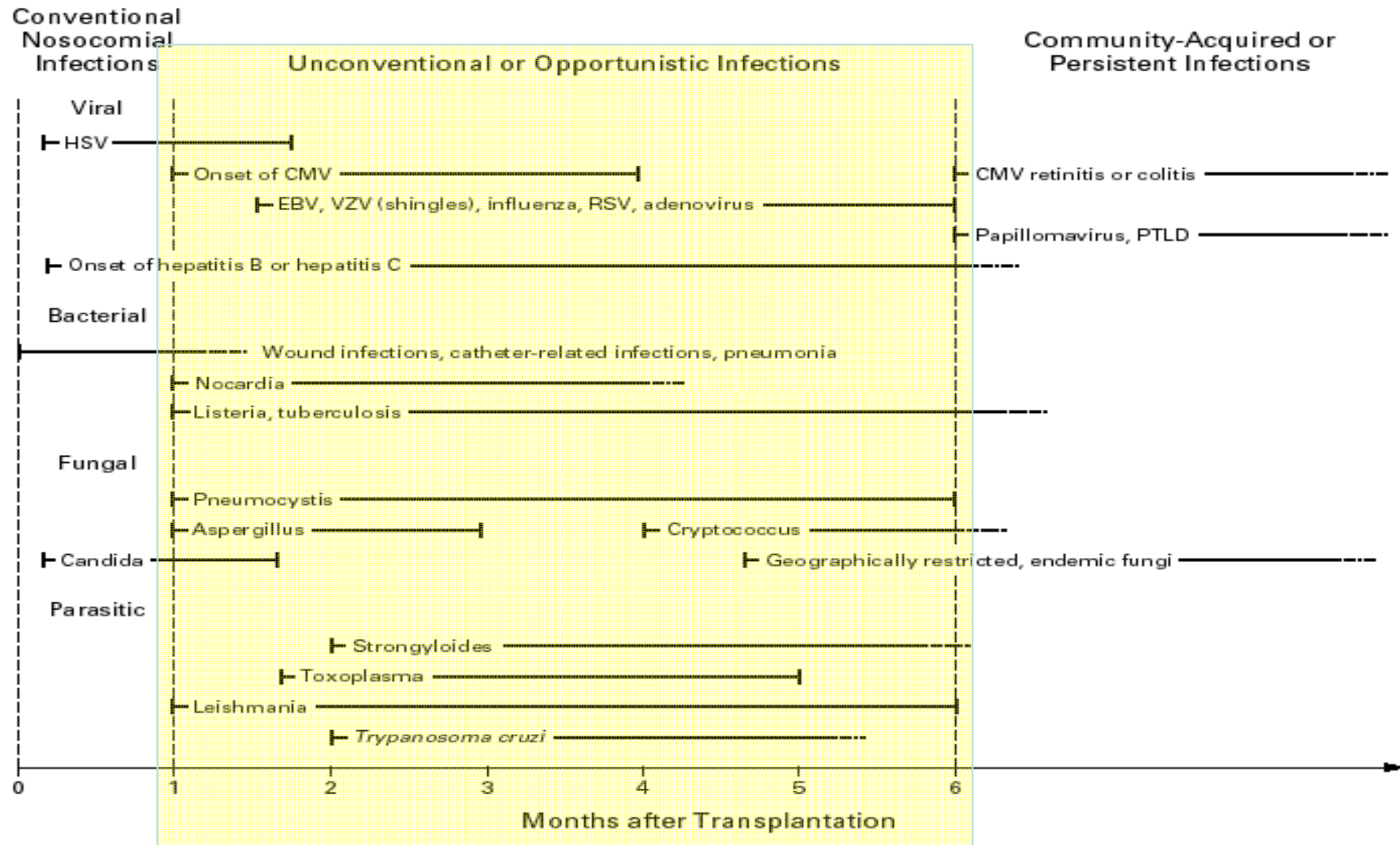
Hospital Vall d'Hebron

Barcelona



*Always use protection*

# Sequence of infections



Fishman, NEJM 1998

# The patient

32 year-old woman

Renal polycystosis with associated  
liver fibrosis

Considered for kidney and liver  
transplantation

Can we **prevent** infections right  
now?

# Prevention **begins before** transplantation

Medical history

Vaccination

Treating latent infections

Syphilis

Tuberculosis

Strategies for safe living

# The patient

Liver-kidney transplantation August 2008

Immunosuppression

No induction

Tacrolimus, mycophenolate and prednisone

Can we continue **preventing** infections at this time?

# Prevention **continues at** transplantation

## The donor

- Blood cultures

- Preservation fluid cultures

## and the donor/recipient

- Serologies (HIV, CMV, hepatitis, *T. gondii*)

## Antibiotic prophylaxis

- Amoxicillin/clavulanate 2 gr/8 h x 2 d

# The patient

CMV late infection treated with valganciclovir in December 2008

Liver PTLD treated with rituximab in March and May 2009

Liver and kidney acute rejection treated with methylprednisolone bolus in June 2009



# The patient and the problem

Admission on September 28th, 2009:

Fever (39°C) with no chills

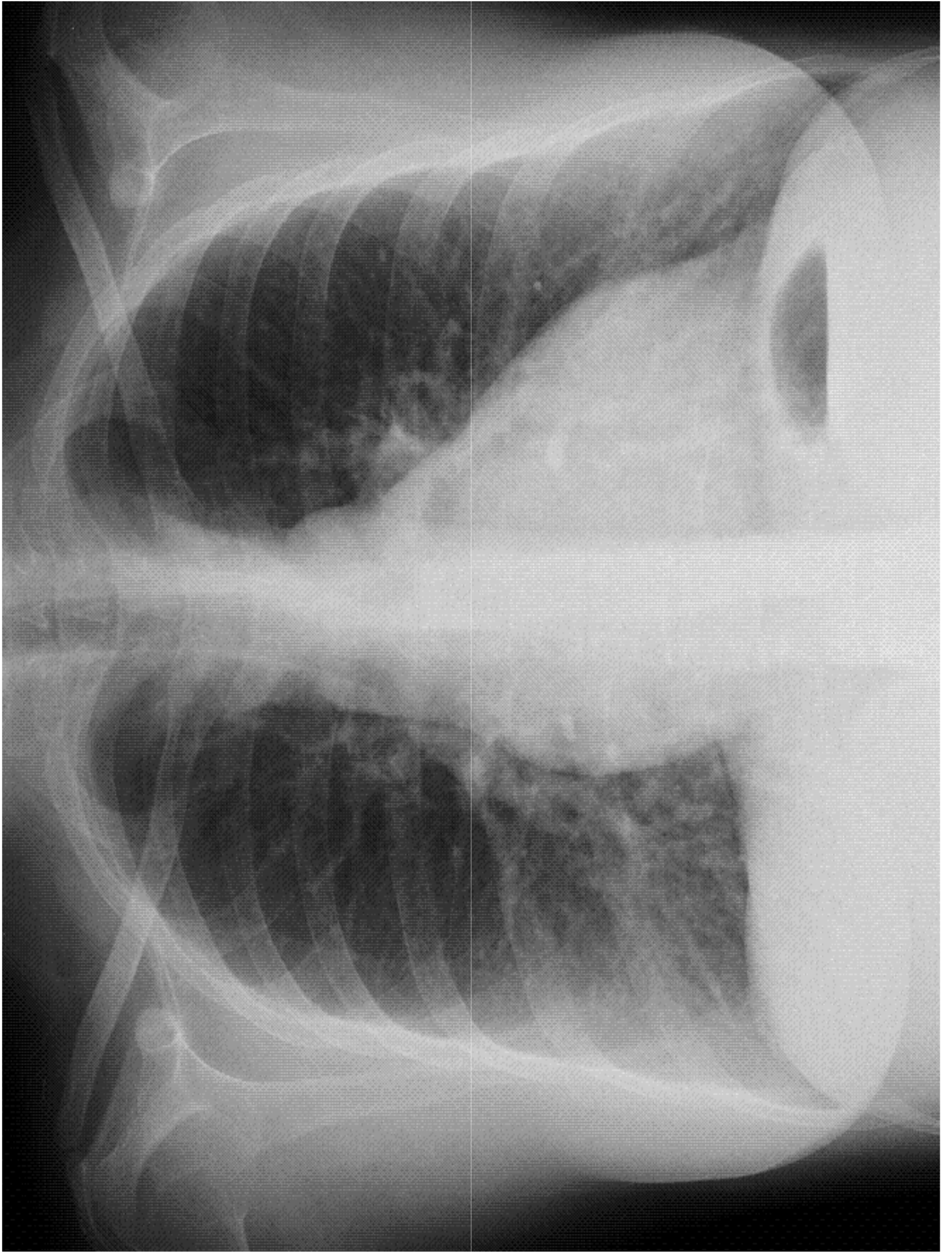
Dry cough

Arthromyalgia

Normal physical examination

Normal blood analysis

What's **next**?



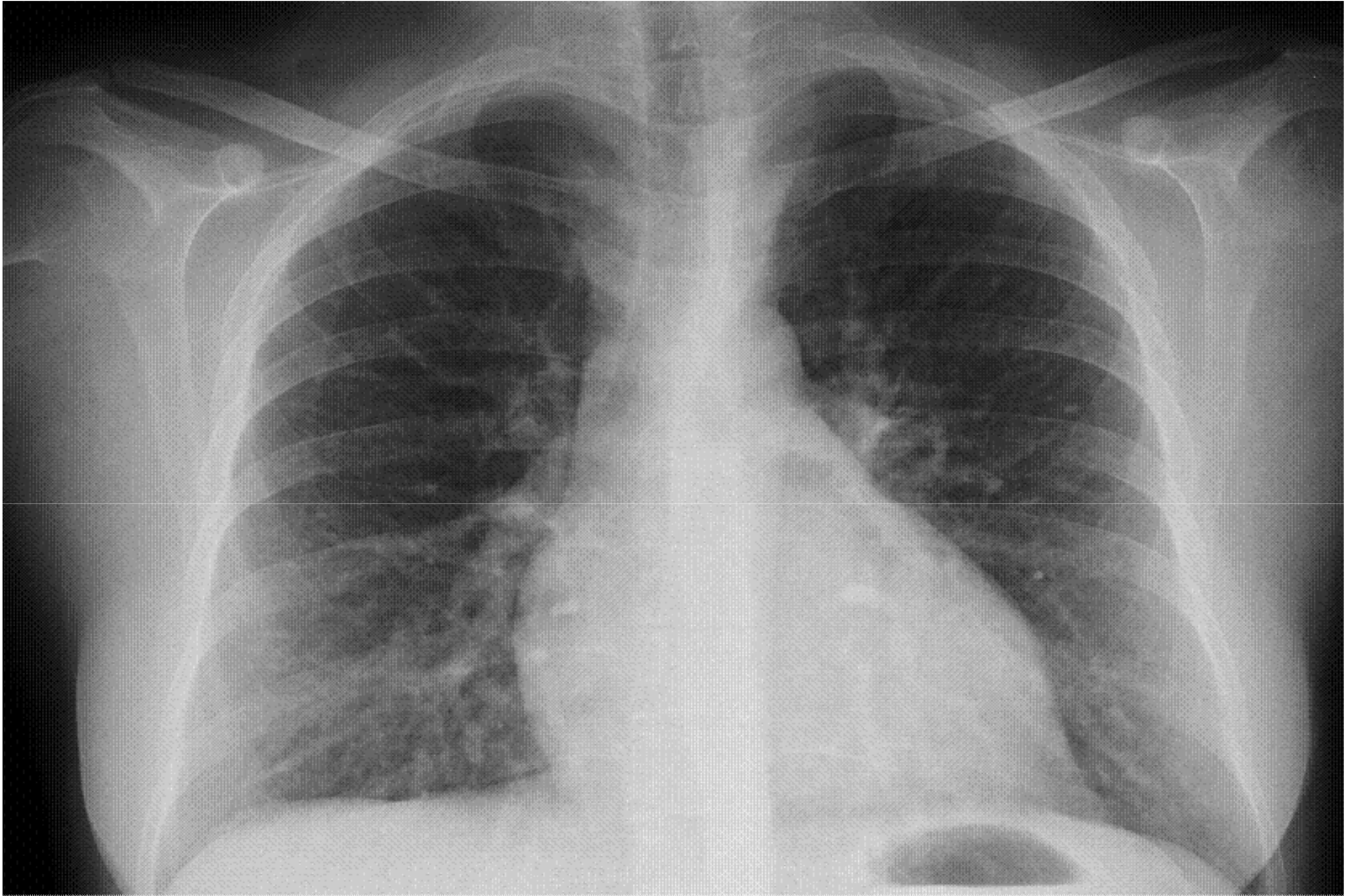
# Trying to find the **diagnosis**

Nasal swab negative for respiratory viruses

CMV PCR in blood negative

Blood and urine cultures negative

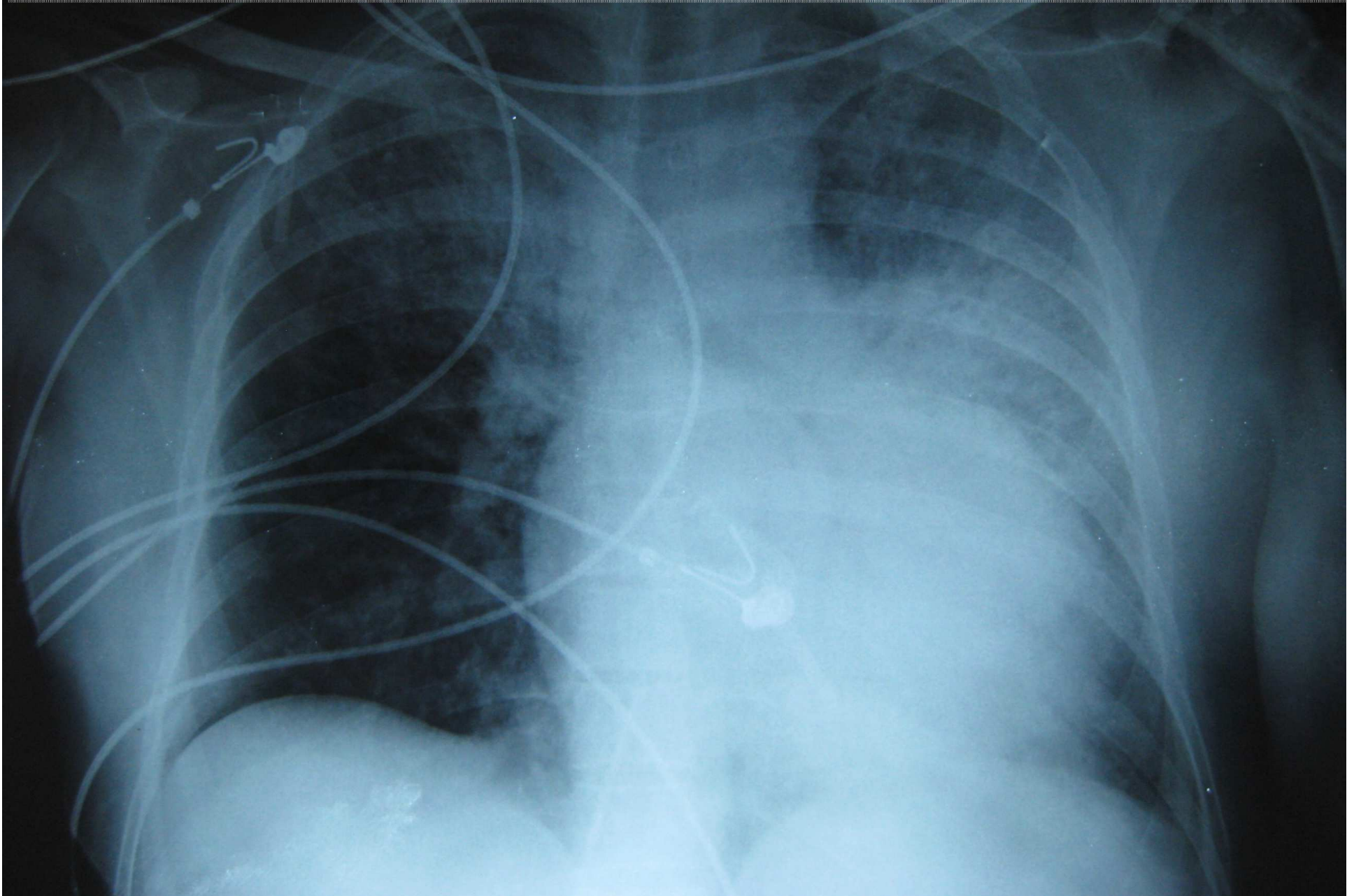
Abdominal ultrasound imaging with no pathologic findings



Three days after admission...



# Respiratory failure



# The patient

## Etiology?

Bacterial?

Viral?

Fungal?

Parasitic?

Others?

# The patient

## Empirical treatment:

Cefepime 2 gr/8 h IV

Levofloxacin 750 mg/d IV

TMP/SMX 160/800 1 ½ ampoules/6 h IV

Is there **anything else** to do?

# The patient

## Bronchoscopy

Bacterial cultures negative

Fungal cultures negative

Viral identification by IF negative

Was any determination **positive**?

*Pneumocystis jirovecii* by IF



# Prevention never ends

What did we all forget?

## PCP prophylaxis

TMP/SMX 80/400 mg/d from acute rejection to febrile neutropenia

Nebulized pentamidine 300 mg/month until 3 months ago

# Messages to take home

Prophylaxis **should not** be **limited** to the beginning

**Tailored** prophylaxis by identifying different risk factors