

A Legion Hiding In The Mud

UDS Université de Sherbrooke

OBJECTIVES

- To recognize *Legionella longbeachae* as an emerging infectious disease and public health concern.
- To present a case of severe ARDS due to *Legionella longbeachae*

CASE

64M. Informatician. Physically fit.

PMx : Pulmonary sarcoidosis (s/p)

Presents x 7 days :

- Dry cough
- Shivers
- Myalgia, arthralgia
- Worsening dyspnea

Allergy : None

Vaccination : Complete

T/OH/Recreative drugs : None

Prescription drugs : NSAIDS

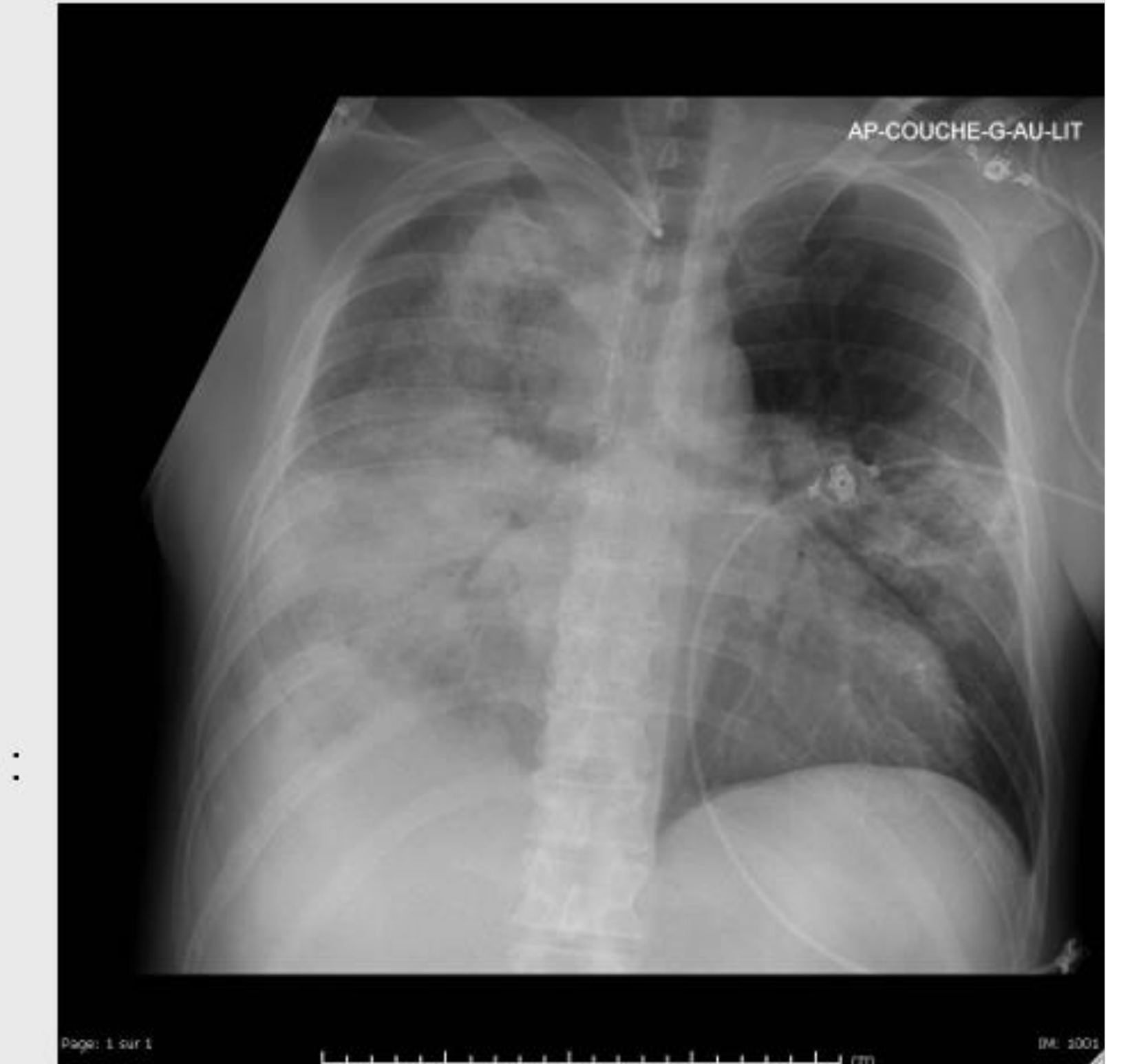
COVID screening tests -ve

CASE

- Rapidly deteriorating respiratory insufficiency requiring endotracheal intubation
- Profound septic and cardiogenic shock

Within hours of his admission, V-V ECMO was started due to :

- Deterioration of respiratory insufficiency despite optimal ventilation (including prone position)



LEGIONELLA LONGBEACHAE

Microbiology : Unknown modes of transmission

- Filamentous gram-negative bacilli
- Specific tropism to soil
- No proliferation in water
- Can live inside cells (i.e. macrophages, protozoa)

Epidemiology : Found at Longbeach (California, USA)

- Adults < 50 years old
- Strongly associated with exposure to soil and potting mix
- Also associated with immunosuppression, smoking
- Rising incidence, especially in Oceania (Australia)
- 5% of infection of *Legionella* spp.

Clinical presentation :

- Identical to *L. pneumophila*, potentially less severe
- Pontiac fever → ARDS
- G-I symptoms

Diagnosis :

- Limited to dedicated culture

Treatment :

- Macrolides > fluoroquinolones, doxycycline
- 7 to 21 days (depending on severity of presentation and immunity status)

CONCLUSION

Importance of a complete history of exposure :

- Patient was exposed to soil weeks prior to infection

Public Health Concern : Part of CDC list of emerging infectious diseases

- Prevention of transmission : Lack of evidence

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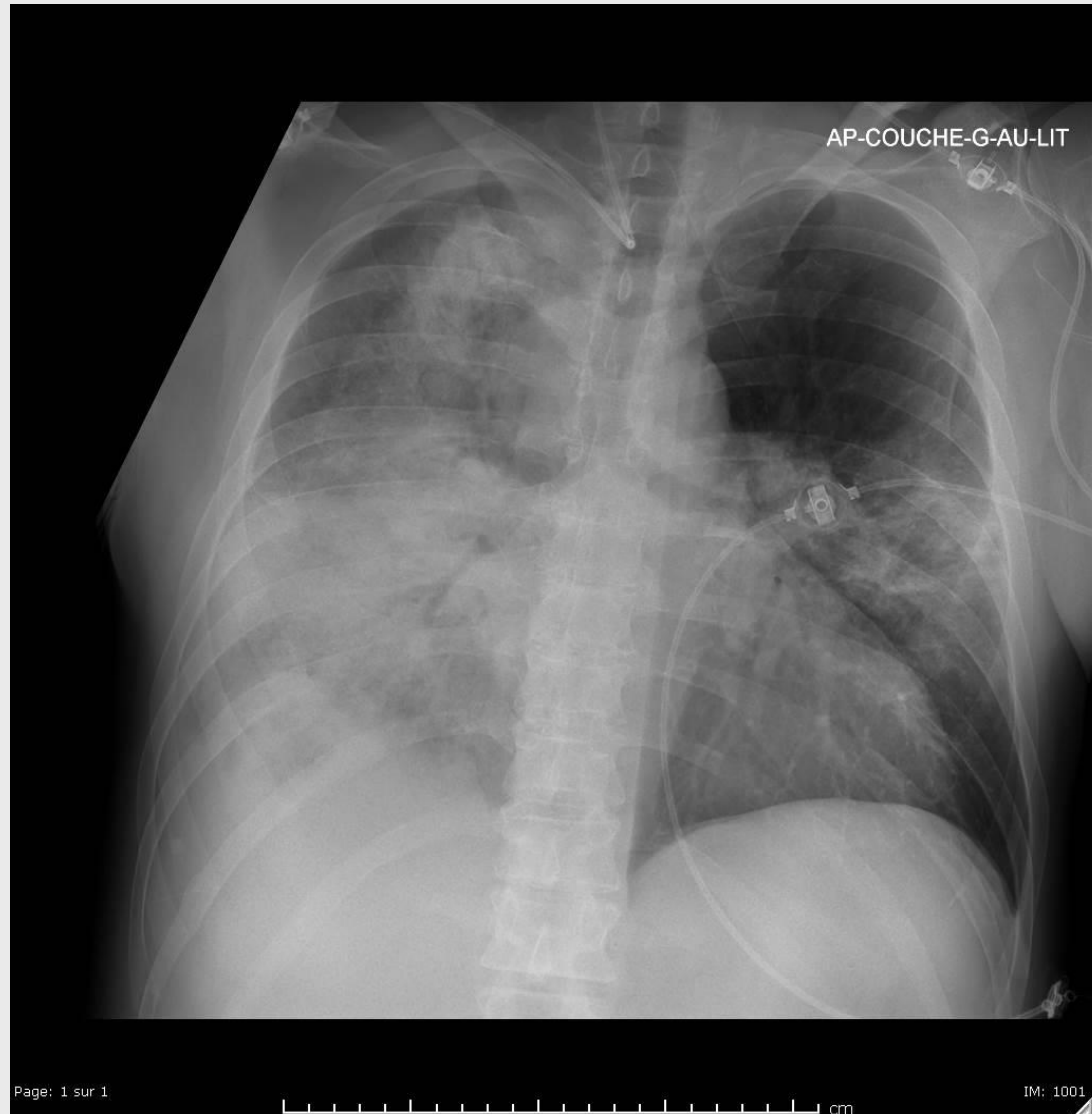
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