

Case Presentation

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R2

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History

- 68-year-old man, returned from a trip 10 days prior to presentation.
- Presented to an urgent care with dyspnea, cough, fevers, chills, and myalgias.
- Diagnosed with pneumonia and prescribed doxycycline.
- Patient's symptoms subsequently worsened and he was sent to Barnes for further work-up.

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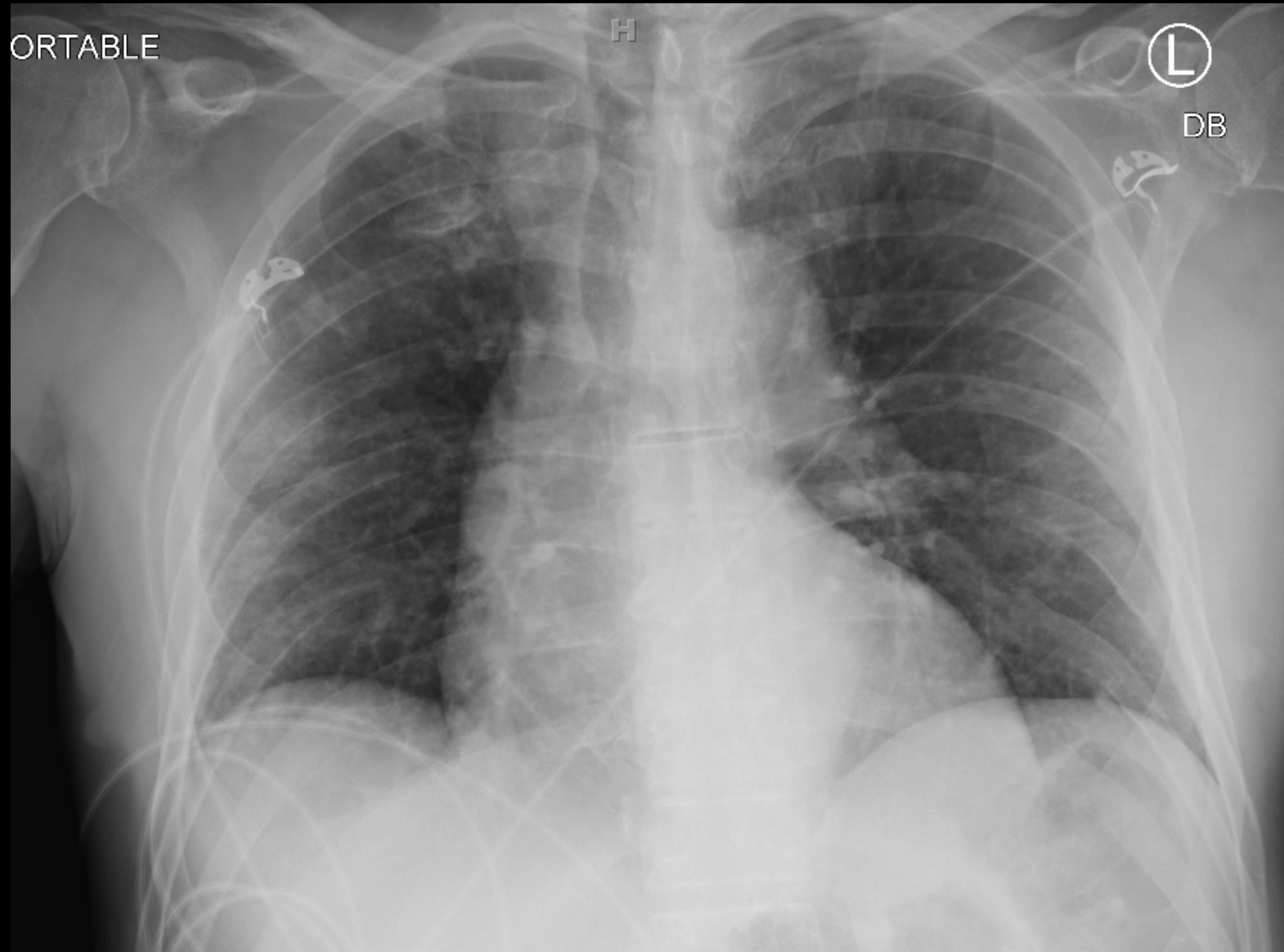
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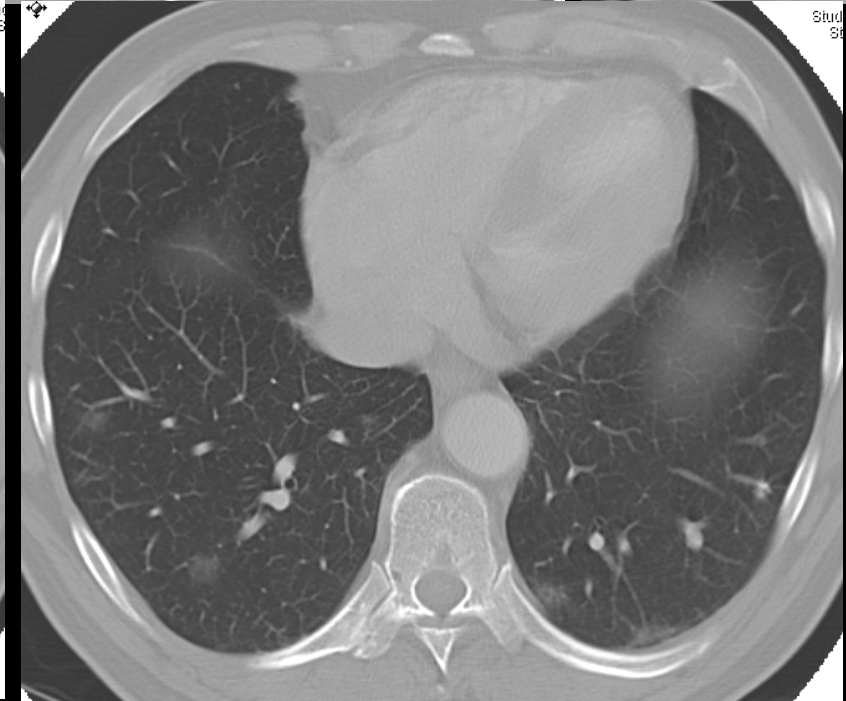
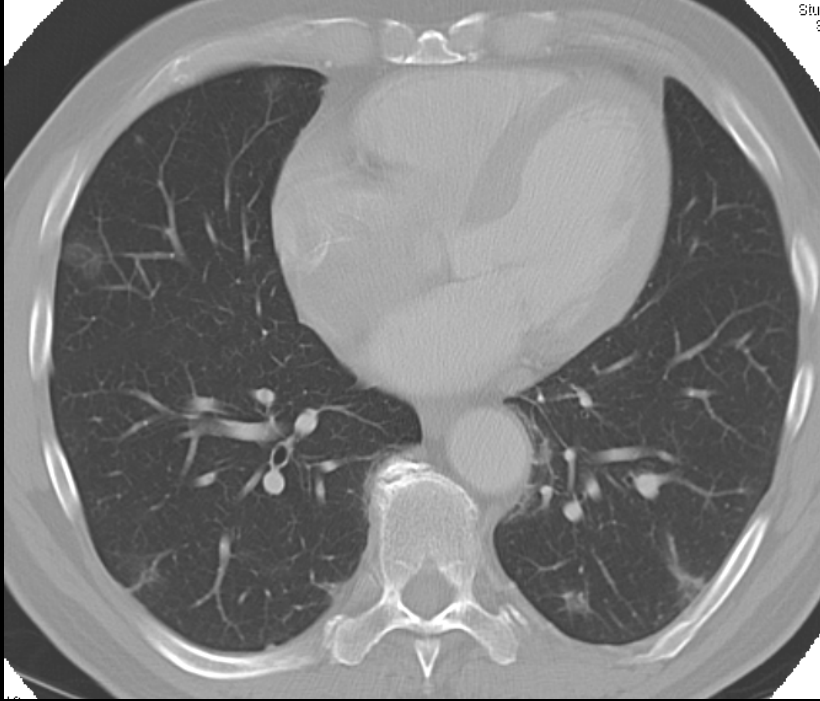
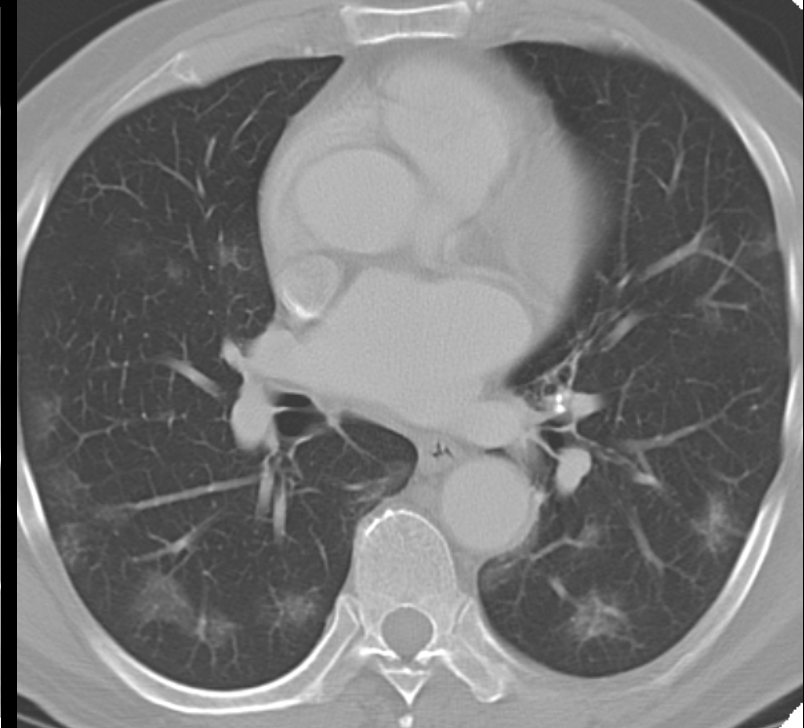
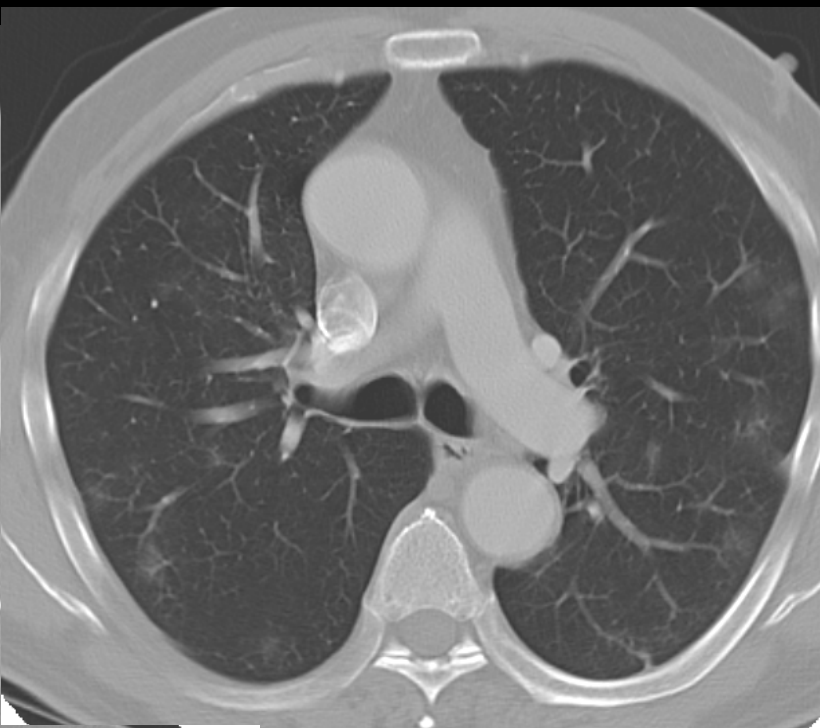
Findings

- Peripheral air-space opacities
- No pleural effusion, pneumothorax, or pulmonary edema.



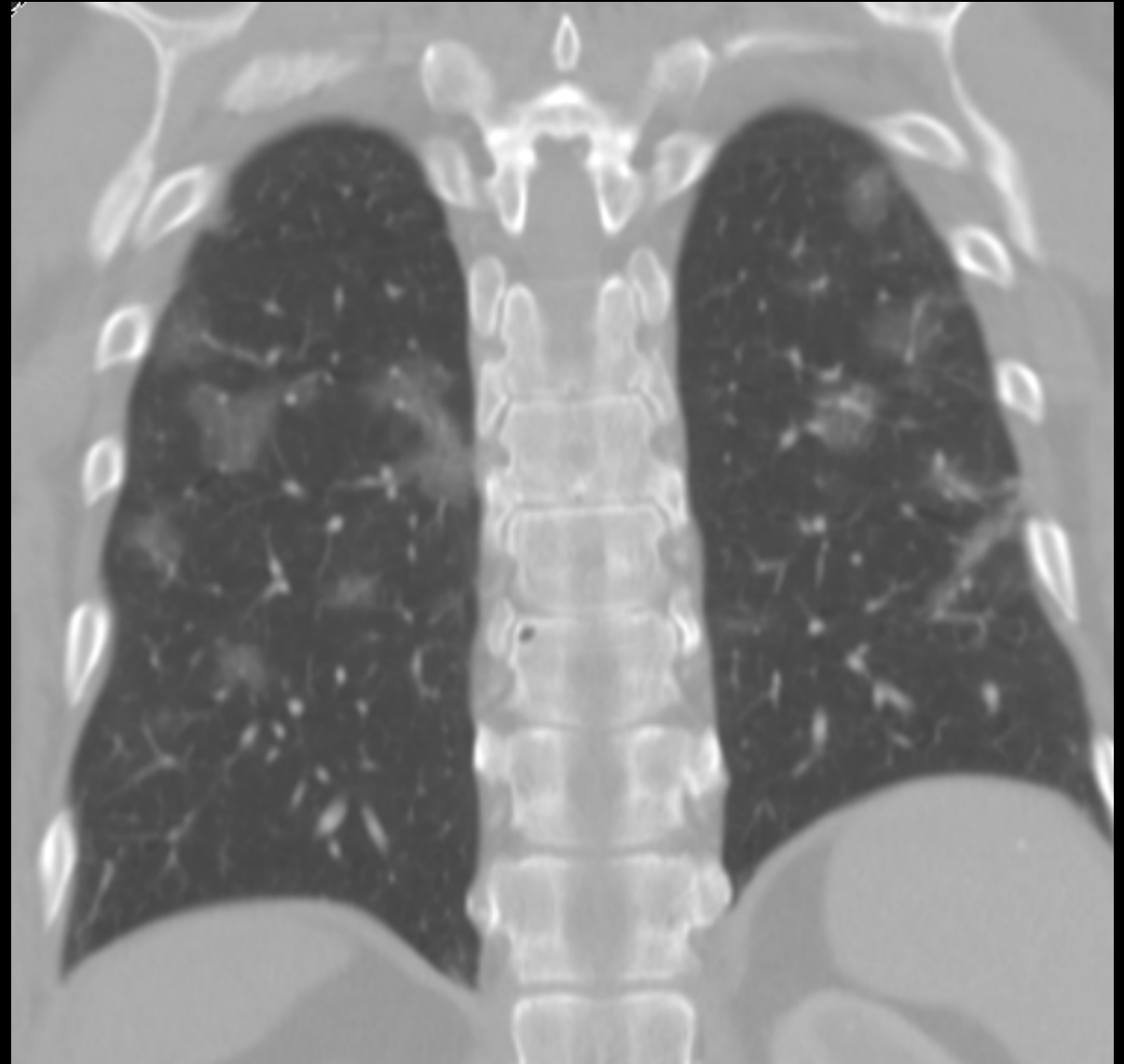
Differential Diagnosis

- Organizing pneumonia
- Chronic Eosinophilic pneumonia
- Pulmonary infarction



Findings

- Ground-glass opacities in a peripheral distribution
- No pleural effusion, pulmonary edema, pneumothorax, or pulmonary embolism



Differential diagnosis

- **Organizing pneumonia from**
 - **Viral pneumonia**
 - Vasculitis
 - GVHD
 - Immunotherapy
 - Other medications

What is the most common CT manifestation of COVID-19?

- A- Lymphadenopathy
- B- Ground glass opacities
- C- Pneumothorax
- D- Volume loss

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- A- CT
- B- RT-PCR
- C- PET-CT
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Differential diagnosis

- In the setting of the coronavirus pandemic, these findings are related to OP in COVID-19. This is especially true in a patient with no prior medical history who is not on any medical therapy
- COVID 19 pneumonia has been shown to manifest mainly as an organizing/viral pneumonia with peripheral ground glass opacities but the rate of coinfection can be as high as 25% with other organisms
- One cannot exclude COVID with CT
- A negative CT may be seen early in the disease
- The best study for making the diagnosis of COVID 19 pneumonia is RT-PCR

References

- Ye, Z., Zhang, Y., Wang, Y. *et al.* Chest CT manifestations of new coronavirus disease 2019 (COVID-19): a pictorial review. *Eur Radiol* (2020). <https://doi.org/10.1007/s00330-020-06801-0>