# Case presentation JSRS 26: An unusual cause of fever and persistent cough

Johannes Bjergfelt, MD & Gina Al-Farra, MD

https://www.eurorad.org/case/19327

# JSRS 26


”Radiation House” at the JSRS booth at ECR 2026


”Radiation House” TV show on netflix

# Case presentation JSRS 26: An unusual cause of fever and persistent cough

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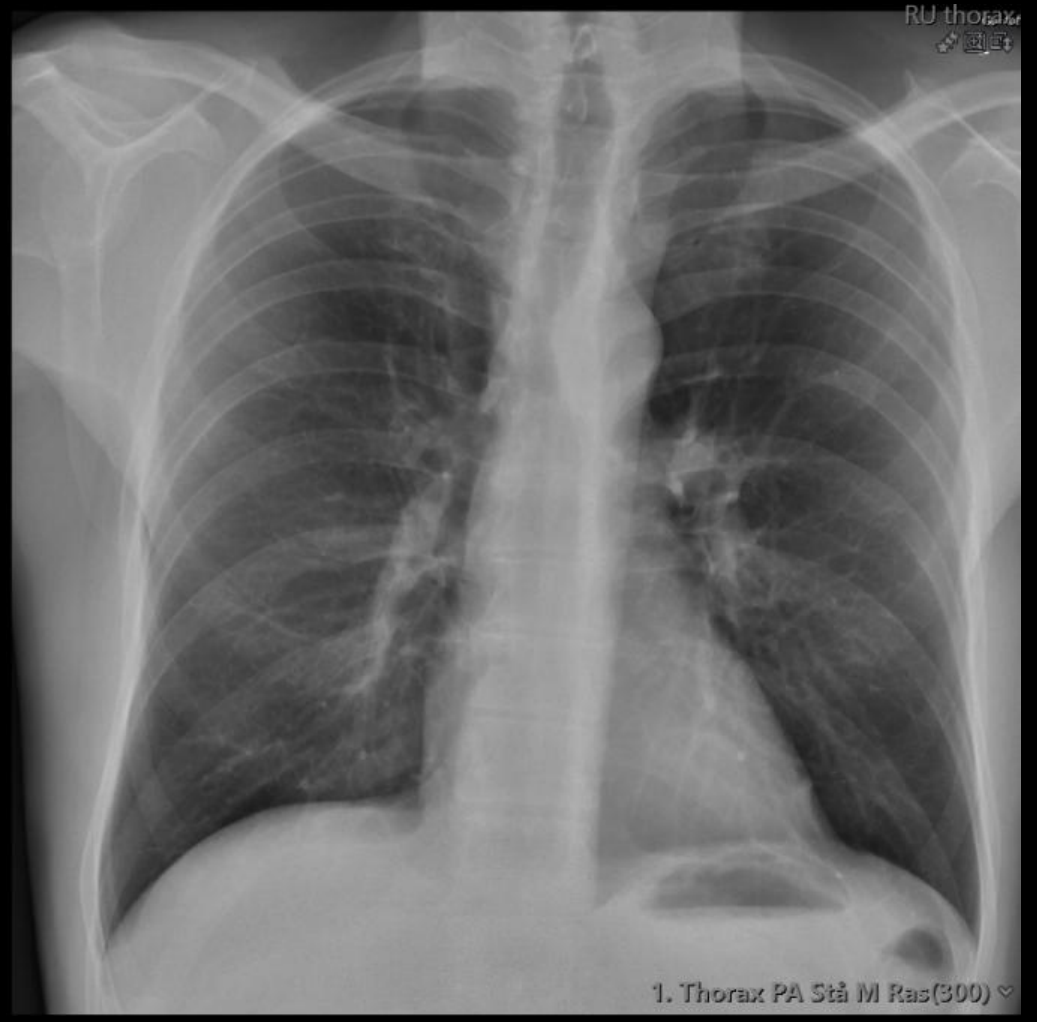
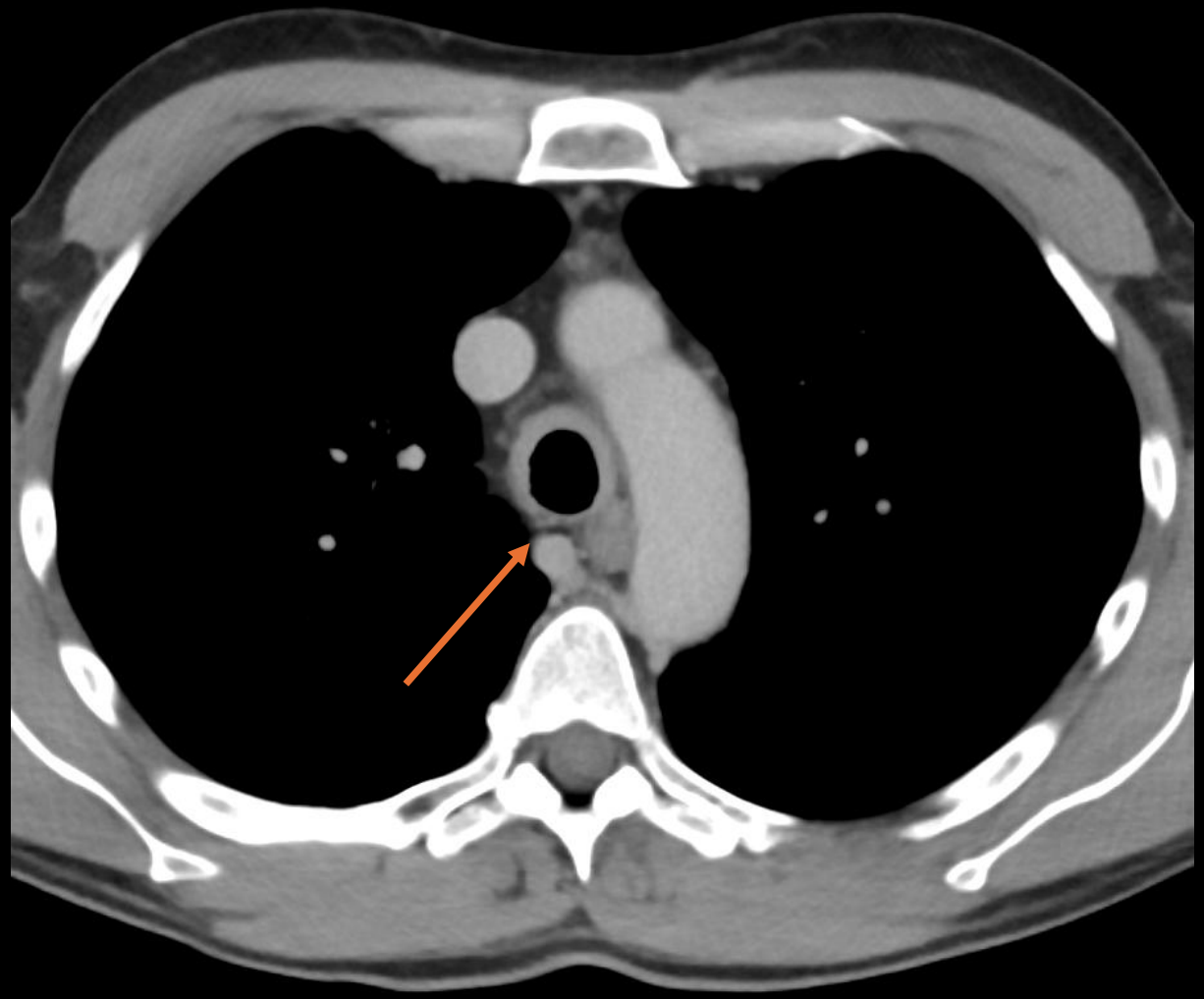
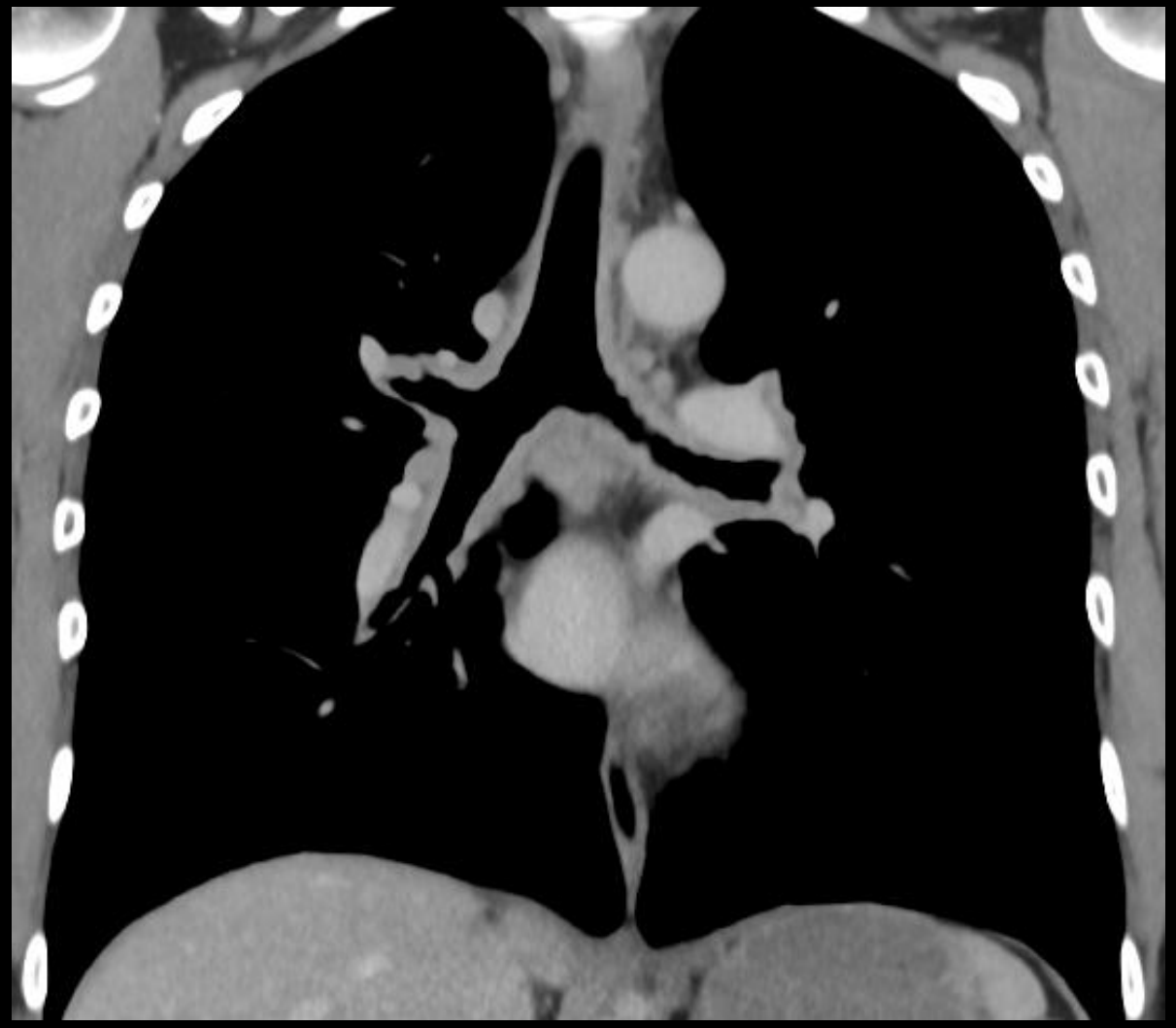
# Clinical History

- 52-year-old man with a history of chronic sinusitis, otherwise healthy
- Presents with a low-grade fever and persisten cough
- Elevated CRP (>100) and leukocytosis
- Unremarkable Chest x-ray x 2
- Persistent symptomps despite five courses of antibiotics over six weeks
- Now referred for a CT thorax/abdomen

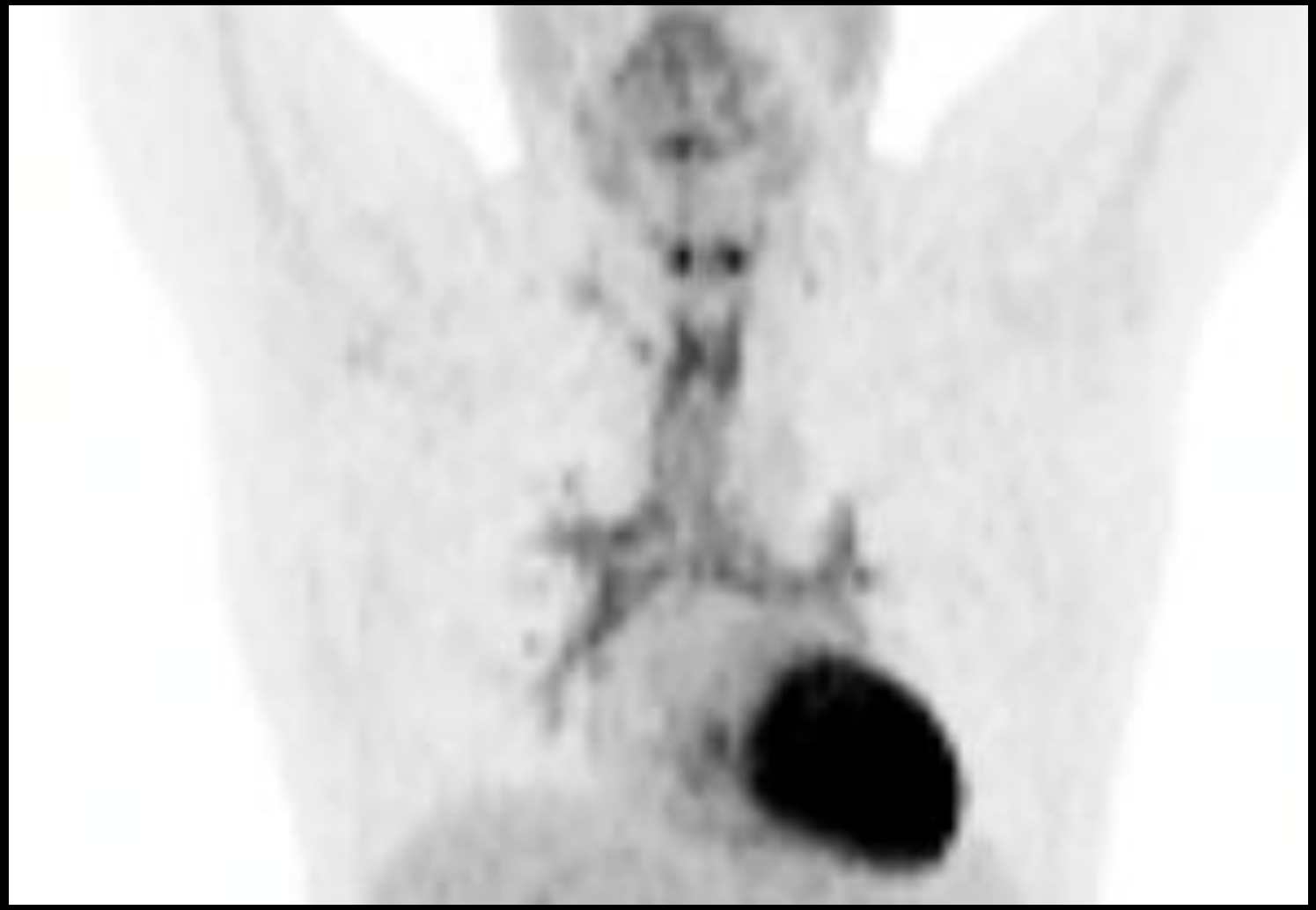


# Imaging findings: CT thorax/abdomen





# Imaging findings: FDG PET/CT



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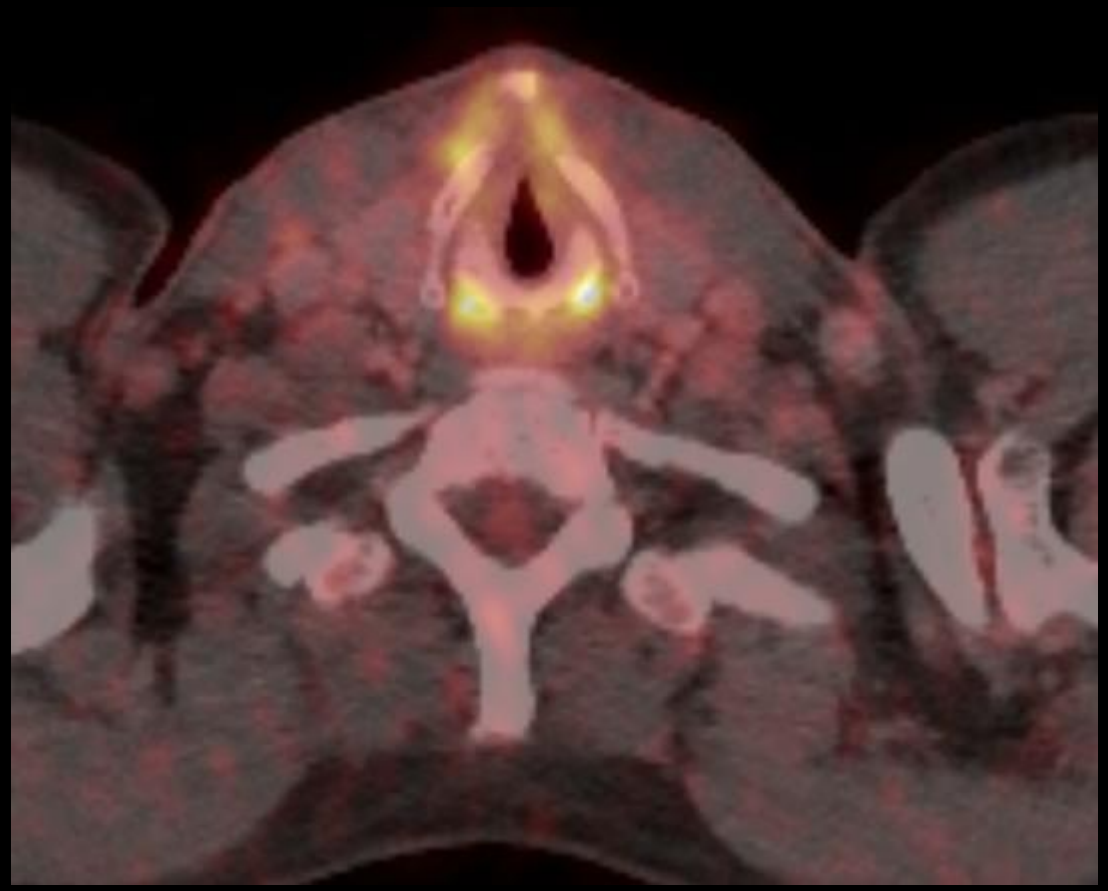
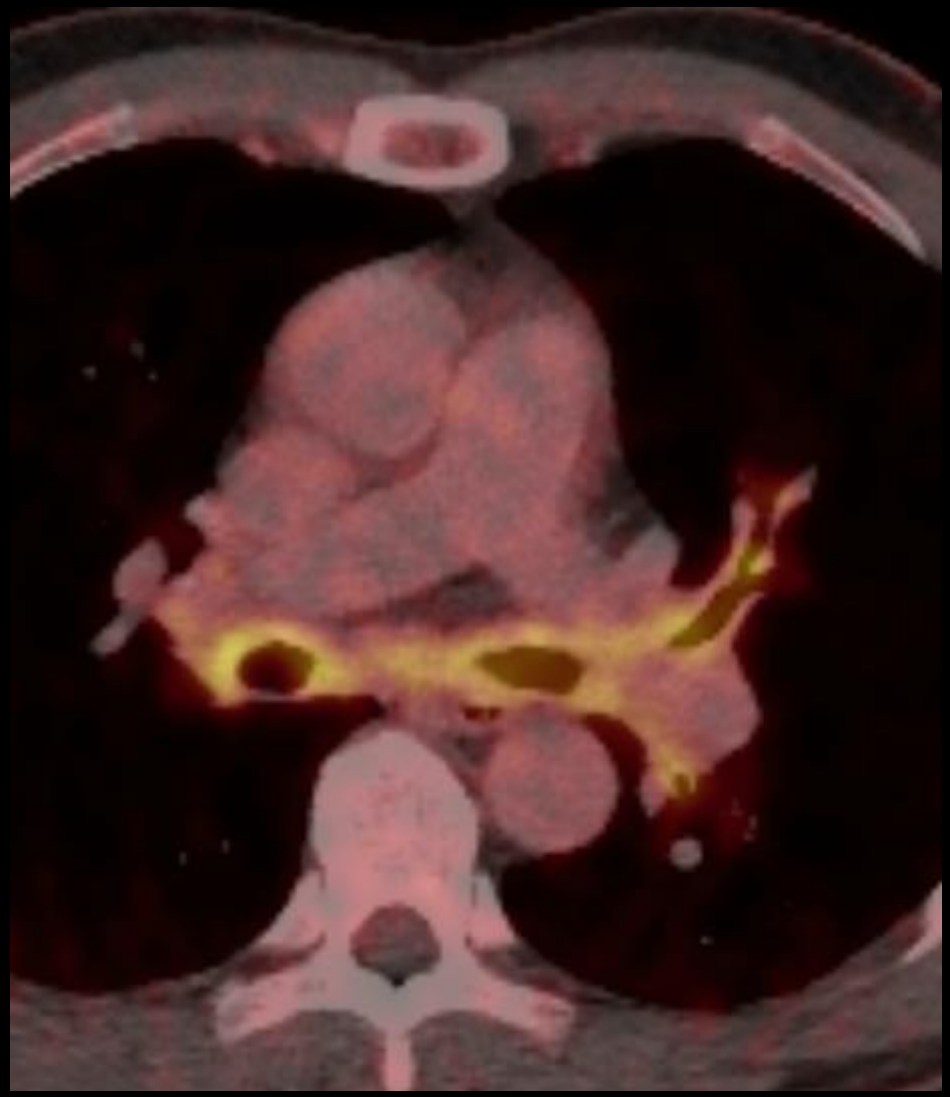
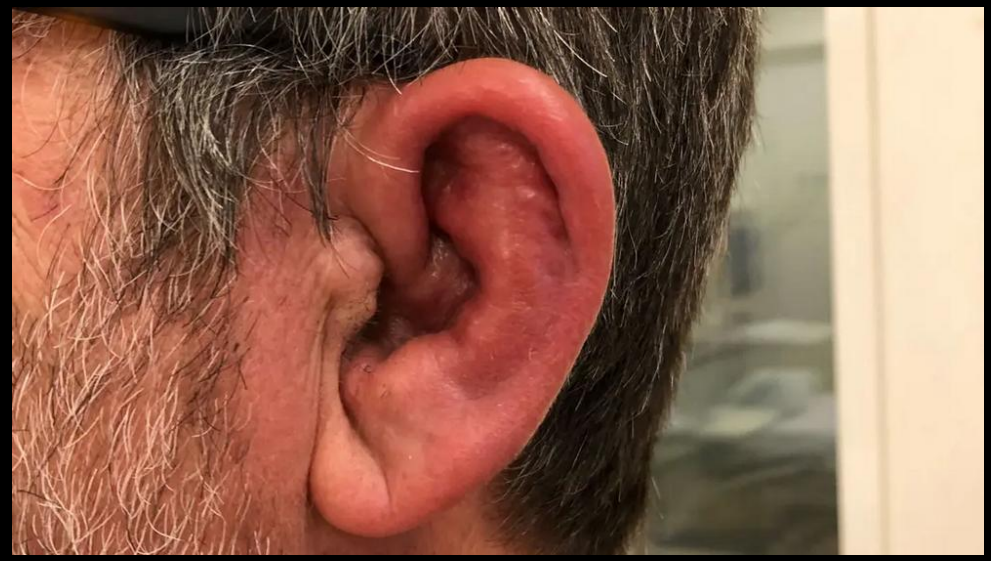




# Relapsing polychondritis

- Rare, chronic, autoimmune disease characterized by repeated inflammation of cartilaginous tissues, including those of the auricles, nasal septum, respiratory tract, and joints.
- The inflammation results in edema, and progressive cartilage degeneration, which in the respiratory tract can become life-threatening.
- Typical onset is in mid-adulthood, often presenting with subtle or fluctuating symptoms, causing diagnostic delay.

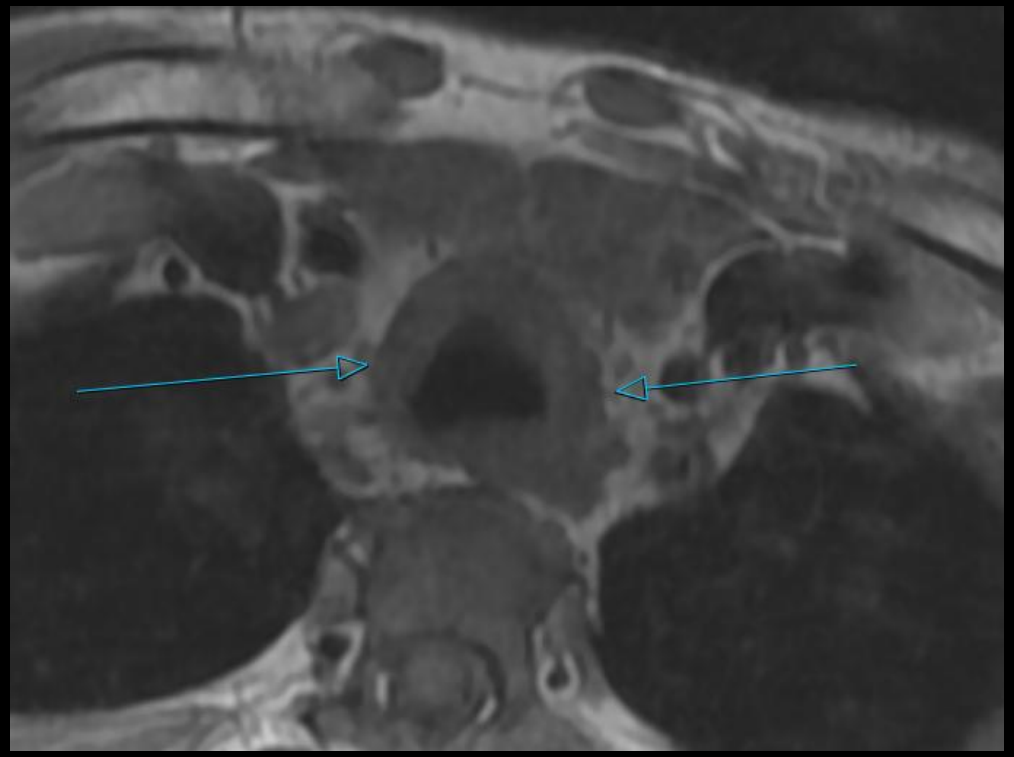


# Relapsing polychondritis

- The patient was referred to a rheumatology department for suspected relapsing polychondritis.
- Biopsy was considered but ultimately deferred due to airway risks.
- Medical treatment was initiated with high-dose prednisolone, followed by biologic therapy.
- Treatment response was assessed with follow up MRI’s

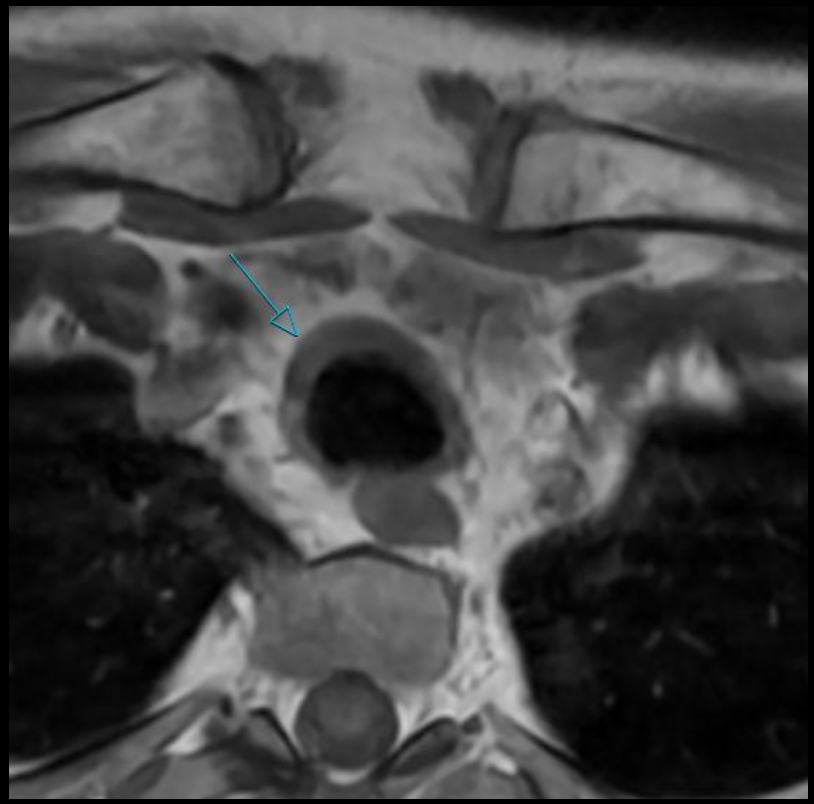
# Treatment respone

**Prior to treatment**



Axial T1-weighted MRI (T1 FLEX + gadolinium) tracheal wall thickening with contrast enhancement, compatible with inflammation.

**After six months of treatment**



Axial T1-weighted MRI (T1 FSE) Partial regression of the inflammatory changes.

# Outcome

The patient improved on treatment, and experienced fewer flare ups. He did however continue to have recurrent exacerbations.

# Thank you

ありがとう ございます