



## *“I can’t shake this cold!”*

Karen Binkley, MD, FRCPC

### *Notes on Linda*

*Age:* 35

*Presentation:* Linda presents with recurrent sinus and chest congestion for the past four months.

- ✓ Symptoms started with an apparent viral illness (nasal congestion, discharge, sinus pressure, chest congestion, cough productive of small amounts of white phlegm, and fever of 38.6 C)
- ✓ Antibiotic treatment provided some improvement, but relief was incomplete and temporary
- ✓ Linda was evaluated by an ears, nose and throat specialist; endoscopy and computed tomography scan revealed minor septal deviation and mucosal edema
- ✓ She had minimal response to intranasal saline and corticosteroids
- ✓ She has relative response to antihistamines
- ✓ Moderate, ongoing fatigue
- ✓ She has relative

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### *Current medications*

- ✓ Acetaminophen as required for fever
- ✓ Linda has no known drug allergies

### *Physical exam*

- ✓ Linda appears slightly unwell and is currently afebrile
- ✓ Nasal turbinates are somewhat edematous
- ✓ Septum shows minor deviation with possible small defect
- ✓ Chest reveals coarse breath sounds, but no consolidation or wheezing
- ✓ Otherwise unremarkable

### *What do you suspect?*

### Laboratory Investigations

- ✓ Complete blood cell count shows slight neutrophilia, erythrocyte sedimentation rate 45 mm/h
- ✓ Alanine aminotransferase elevated at 280 U/L, aspartate aminotransferase elevated at 295 U/L
- ✓ Creatinine elevated at 180 µmol/L
- ✓ Quantitative immunoglobulins: Normal
- ✓ C3, C4 low
- ✓ Antinuclear antibodies, rheumatoid factor negative
- ✓ C and p anti-neutrophil cytoplasmic antibodies negative
- ✓ Allergy skin tests are negative for all aero-allergens
- ✓ Pulmonary function tests and methacholine challenge are unremarkable

### Final diagnosis:

***Wegener's granulomatosis is a vasculitis that typically involves the mid-line respiratory tract***

- ✓ Septal defect is strongly suggestive
- ✓ Fluctuating course without clear response to antibiotics
- ✓ Absence of allergic features or obvious immune deficiency

### Management:

- ✓ Linda is admitted to hospital for further investigations; Wegener's strongly suspected
- ✓ Consideration given to liver biopsy
- ✓ During hospitalization, Linda's creatinine continues to rise
- ✓ Renal biopsy allowed pathological confirmation of a diagnosis of Wegener's granulomatosis with negative ANCA
- ✓ Linda is treated with prednisone and cyclophosphamide with resolution of symptoms



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