8/16/24 Chief Complaint:

54-year-old with past medical history of HTN presented at the triage room at the facility with back pain and dizziness along with unsteady gait. Complaints of headache for 4 days, but back pain and dizziness for less than 24hours. 7/10 on pain scale acute on chronic LBP with no radiation, aggravated by movement and relieved by rest.

VS-99/145/70/16/98/100HR

Neuro exam AAO/ slurry speech other findings negative Chest BL decreased BS at the bases. Placed in the infirmary 23-hr obs. Shortly afterwards he decompensated with increased temp to 102 and low saturations 92% and tachypnea and tachycardia. He was sent to the ER for evaluation and treatment. Did not have neuro deficits at the time

- In the ER he denies any nausea, vomiting, fevers, chest pain, shortness of breath, abdominal pain, back pain, urinary symptoms, or diarrhea. He has never had a stroke and does not use drugs or alcohol. According to EMS when they found him, he was profusely sweating.
- TEMP: 38.8(Oral) HR: 107(Monitored) BP: 169/83 RR: 30 sp02: 95%
- CT Brain and CTA negative for any stenosis or ischemia
- NIH negative
- Given aspirin 324 milligrams once
- Neurology consulted, that recommended MRI
- Stroke power plan activated
- Mild rhabdomyolysis-CK 4000
- WBC 15.2
- CXR: Right-sided consolidation
- Creatinine 2.12, last known baseline normal
- HIV negative
- Home medications include hydrochlorothiazide 25 mg once daily- that was discontinued
- BMP with hyponatremia

Medical Decision Making: D/D- RESP -Possible PNA (covid/flu/RSV) etc. versus UTI versus stroke

Further testing:

- CT chest -opacification of right upper lobe.

- TTE bubble study 8/19 wnl
- IR lumbar puncture, check CSF cytology, BioSure PCR, MS and autoimmune panels, serum AQP4, MOG, thiamine- negative(kind of overshoot)
- Negative ANA, ANCA, normal kappa/lambda ratio 1.38.
- UA showed microscopic hematuria (7 RBC/hpf on 8/17)
- Urine studies 8/17: FeNa 0.1% – likely iodinated contrast induced nephropathy per renal

What are we missing?

URINE- positive for Legionella

Since then, 3 positive cases identified and 10 pending results. The county notified. The water system was checked, and diagnostics revealed that the water temp was meant to be at 120 deg F for hot showers and was kept below 100 deg F following complains from the patient population that the water was too hot.

Discussion:

- Legionellosis, Community-acquired pneumonia is Serious but can be treated
- s/s include
- cough
- sob
- muscle ache
- fever
- headaches
- GI issues

High risk factors:

- Prior smoker
- COPD
- Weakened immune system DM/CKD/CANCER etc
- Age more than 50

Acknowledgement ***www.cdc.gov/legionella***

Legionella are usually spread through water droplets in the air. They live in fresh water and rarely cause illnesses. In man made setting it can grow if water is not properly maintained.

It becomes a health problem wen small droplets of water that contain the bacteria get into the air and people breathe them in.

How legionella affects water system?

1. Internal and external factors like water temp fluctuation biofilm and constriction
2. Grows best in large complex water systems
3. Aerosolized in devices like cooling towers showers hot tubs and fountains

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