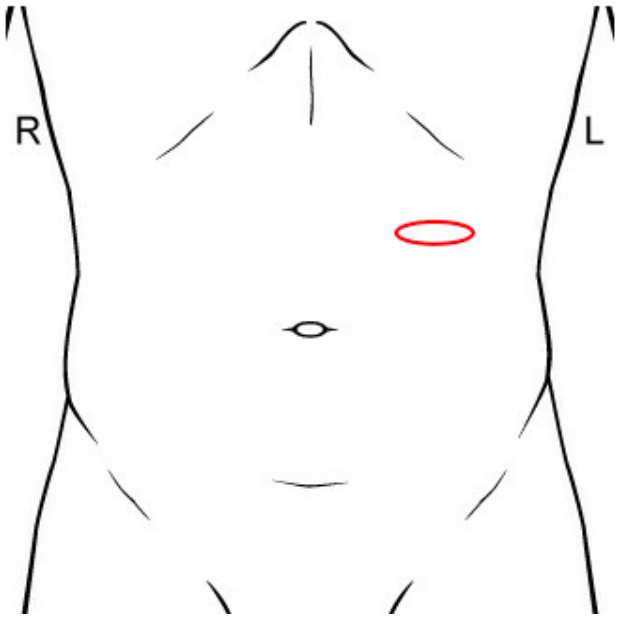
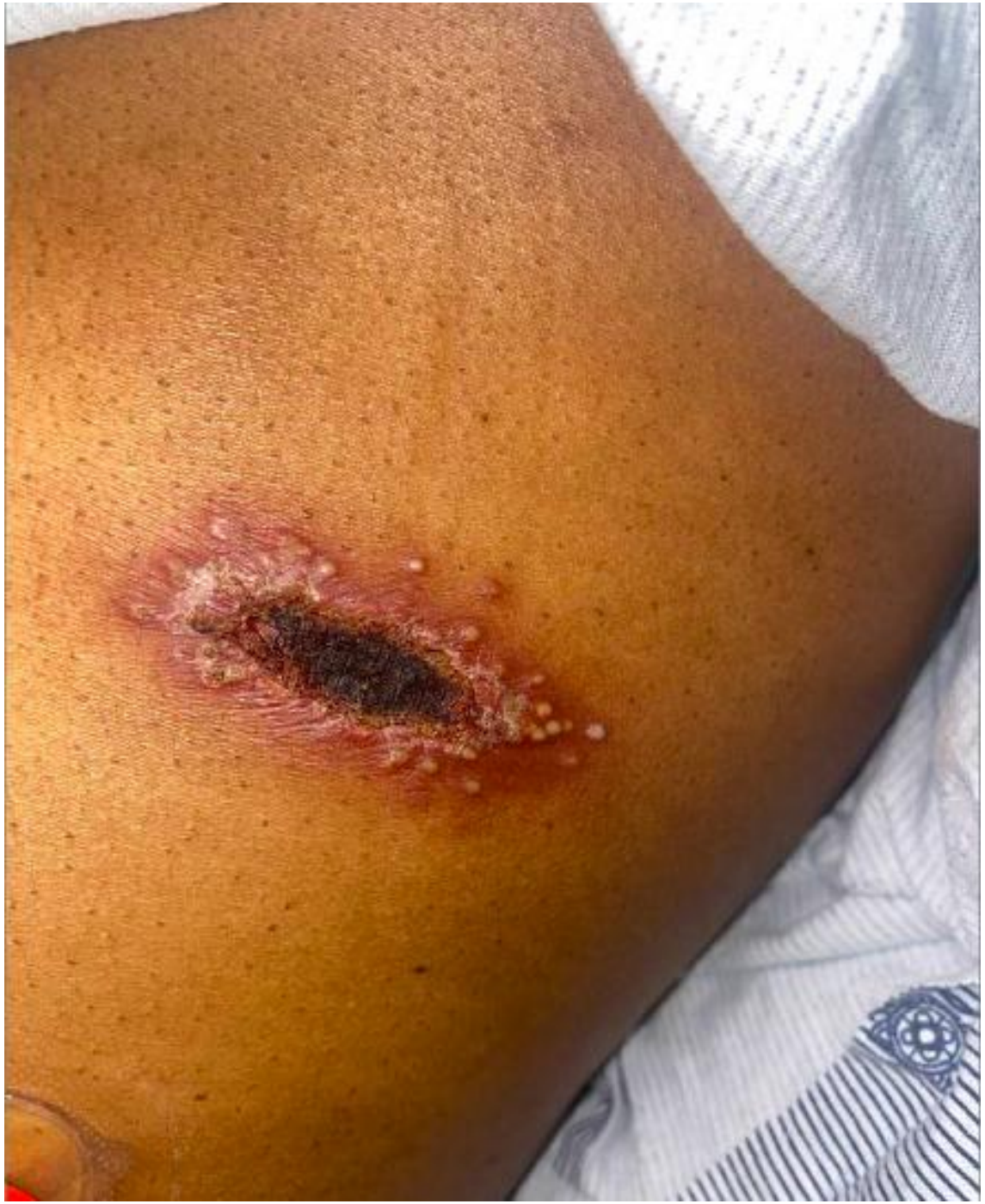
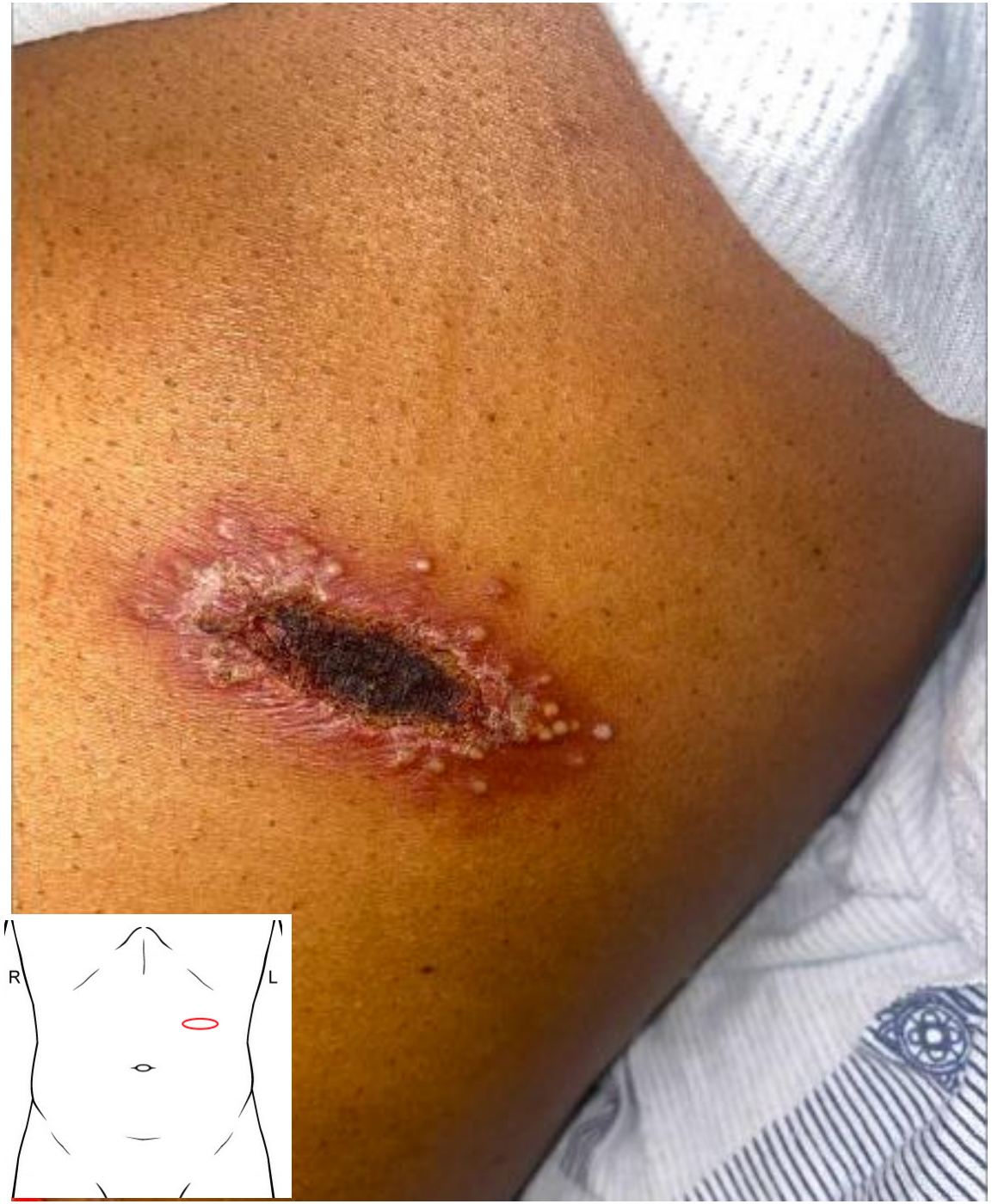
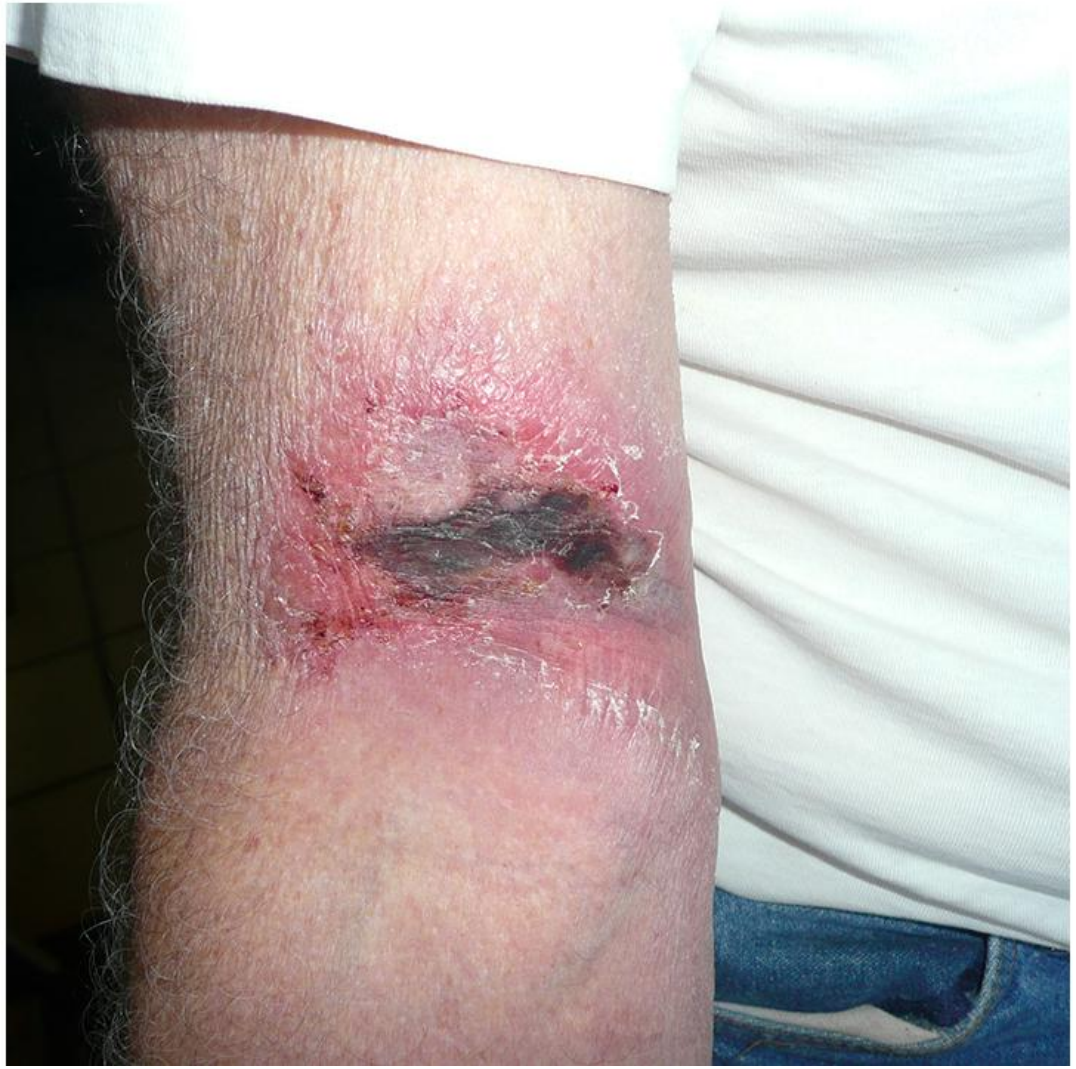

R
L



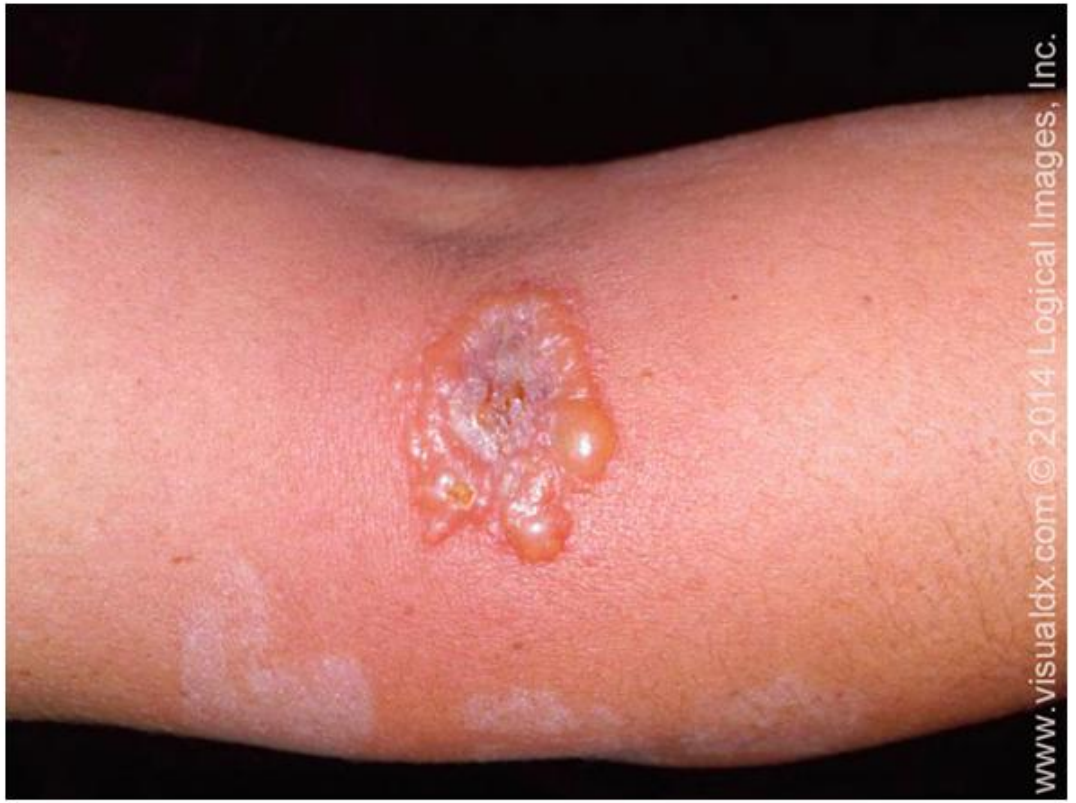


- A 43-year-old presents to the emergency department
- Chief complaint: painful skin lesion.
- He thinks he was bitten by a spider 4 days ago.
- Associated chills, myalgias, and headaches.
- T 100.4, HR 112

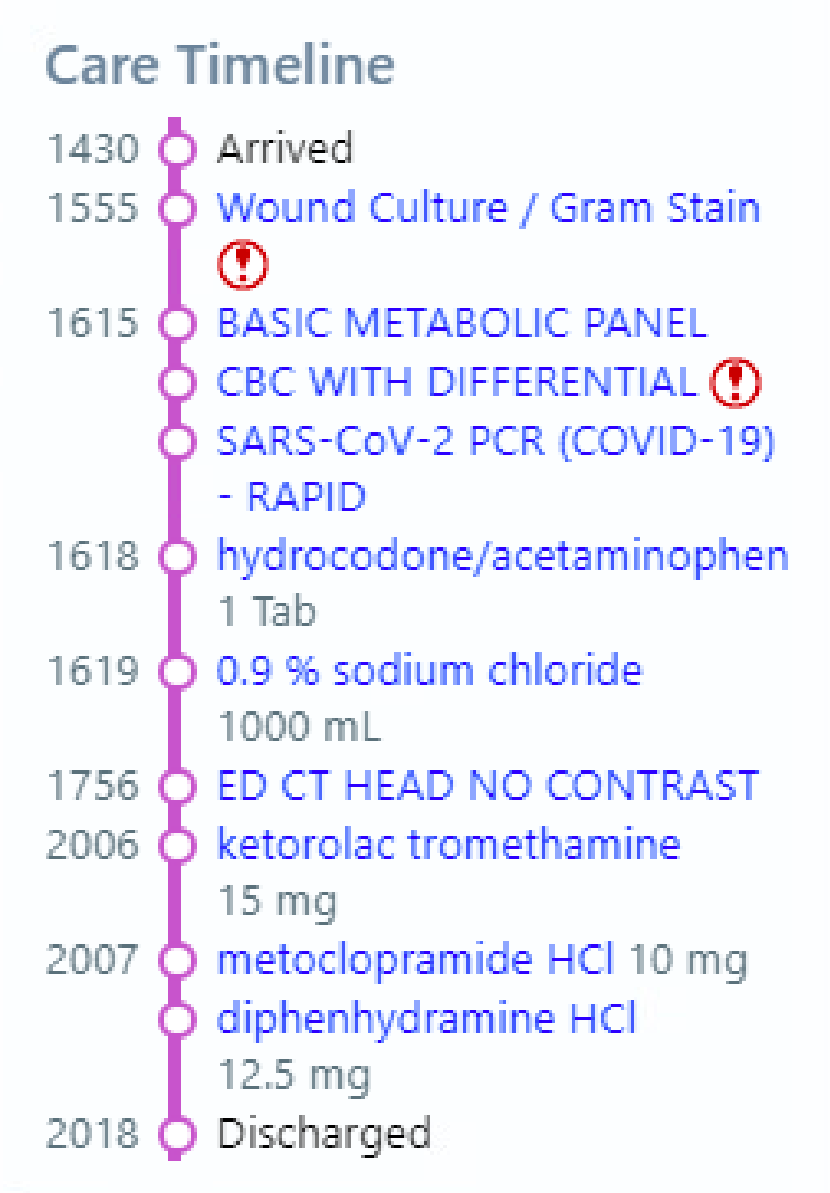
Necrotic brown recluse spider bite



Recluse spider bite with vesiculation



Goddard, J, Stewart, PH. Insect and other arthropod bites. In: UpToDate, Wolters Kluwer. https://www-uptodate-com.evms.idm.oclc.org/contents/insect-and-other-arthropod-bites?search=insect%20bite&source=search_result&selectedTitle=1%7E150&usage_type=default&display_rank=1



Discharged on empiric cephalexin and trimethoprim-sulfamethoxazole

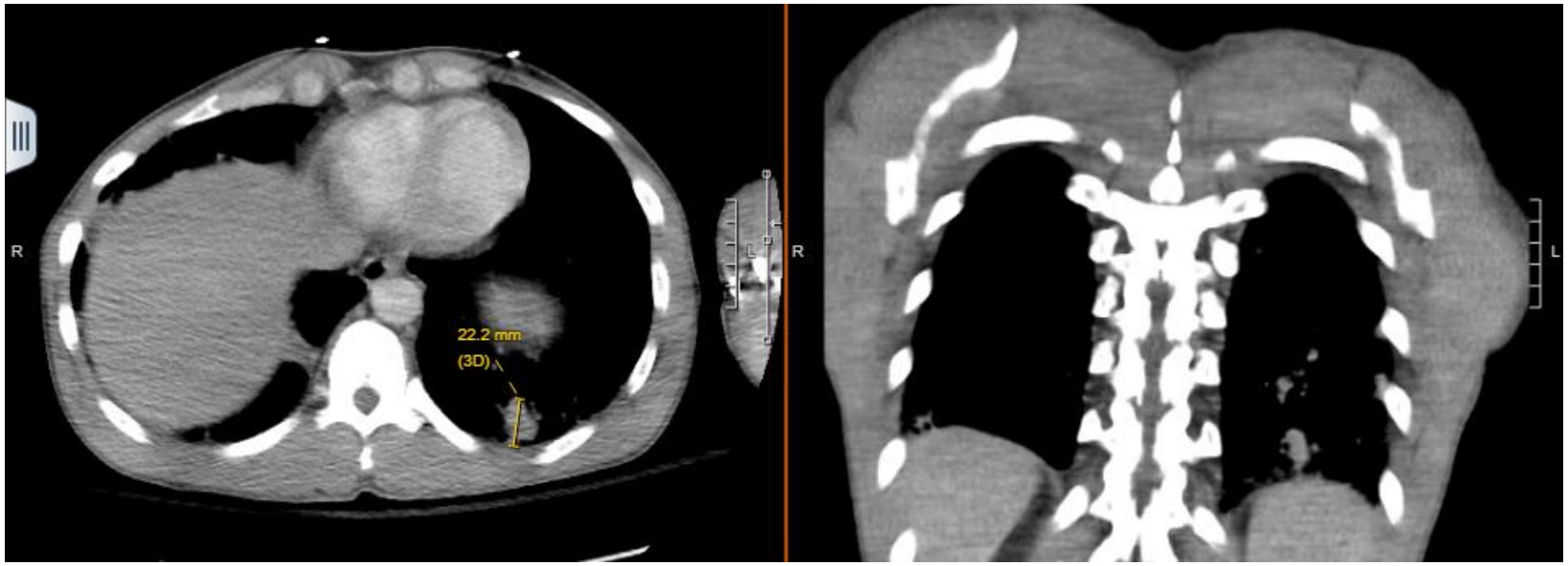
- Five days later, he returns to the emergency department with high fevers, shortness of breath, nausea with emesis, diarrhea, blurry vision, and visual hallucinations.

- T: 102.4 HR:112 RR:24 BP:121/61

- Past medical history: none

- Physical exam: eschar at the left lower chest with surrounding erythema and pustules

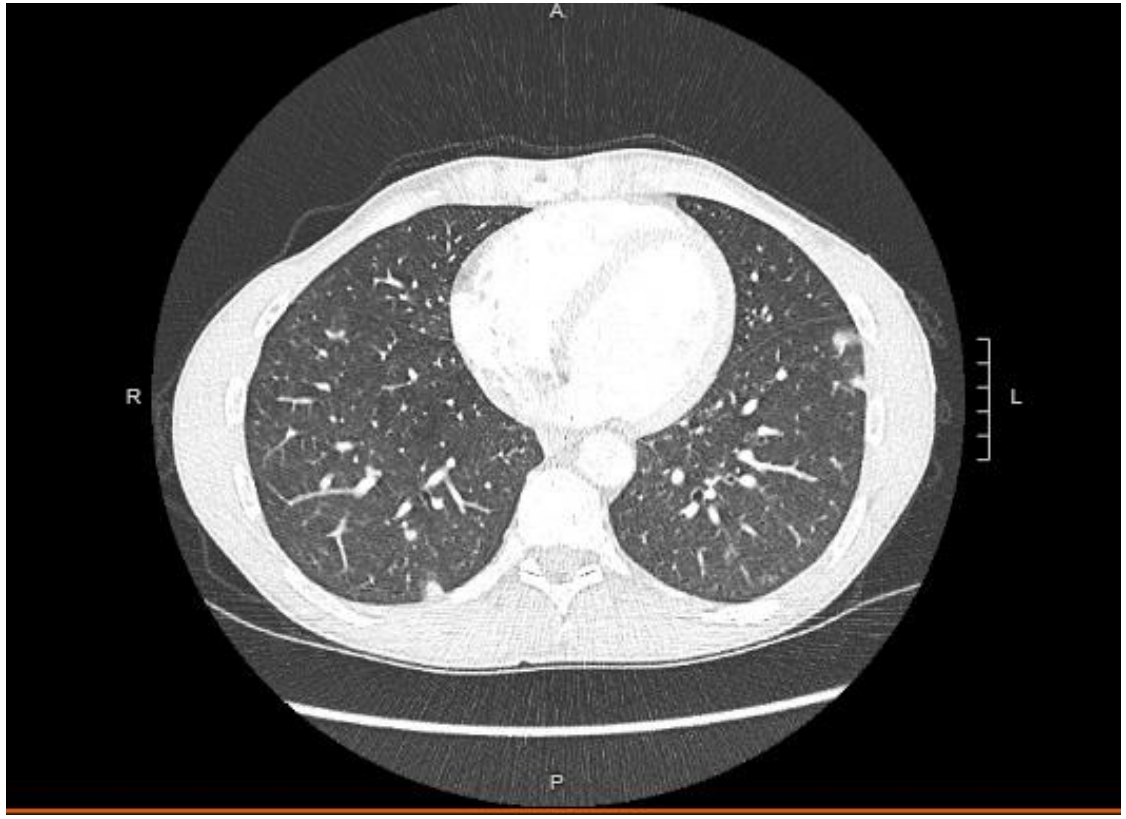
- Labs: neutrophilic leukocytosis, elevated lactic acid and procalcitonin, elevated transaminases, alk phos and direct bilirubin, and hyponatremia and has anion gap

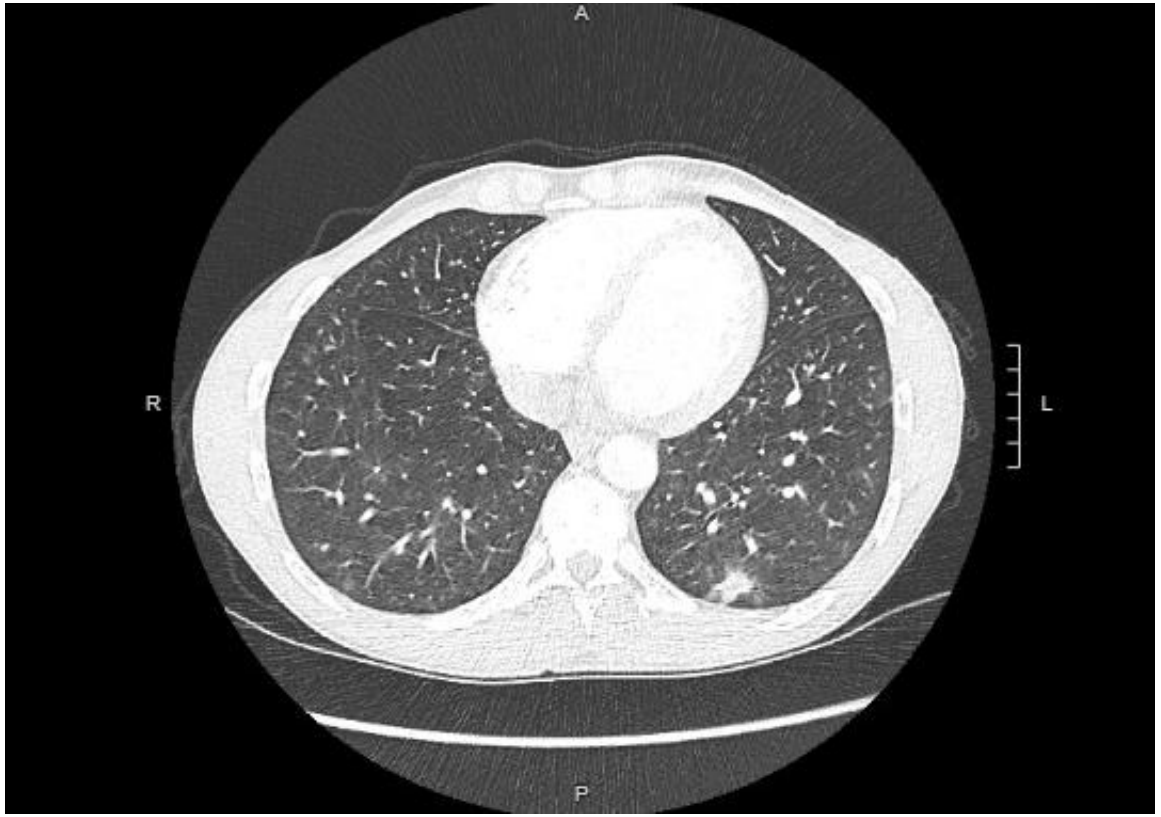


1605 **CBC with Differential(!)**
Glucose cytosis to 18,000. [RM]
1605 **Lactic Acid With Reflex(!)**
Is a lactic acidosis 2.7. [RM]
1605 **HEPATIC FUNCTION PANEL(!)**
Hepatic function panel shows elevated liver enzymes, alk phos, direct bili. [RM]
1606 **PROCALCITONIN(!)**
Procalcitonin is elevated. [RM]
1606 **Basic Metabolic Panel(!)**
Patient is hyponatremic and has an anion gap likely secondary to lactic acidosis. [RM]
1738
IMPRESSION:

1. Innumerable bilateral solid pulmonary nodules concerning for multifocal infection or septic emboli. Metastatic disease possible though less likely in the absence of known primary malignancy.
2. Cholelithiasis without evidence of cholecystitis.
[RM]

Patient was COVID and flu negative.
Chest x-ray was unremarkable.





PACS Images

Show images for CT CHEST/ABD/PELVIS W/ CONTRAST

Impression

1. Numerous bilateral pulmonary nodules concerning for multifocal infection or septic emboli. Metastatic disease possible though less likely in the absence of known primary malignancy.
2. Cholelithiasis without evidence of cholecystitis.

- CT head, lumbar puncture: unremarkable
- Blood cultures: negative.
- TTE: no valvular pathology or vegetations.
- Punch biopsy of the eschar: epidermal ulceration, a dense dermal inflammatory infiltrate, and peri-eccrine inflammation, suggestive a spider bite.
- He improved and was discharged home on a short course of amoxicillin/clavulanic acid and doxycycline.

- His initial wound culture was ultimately sent to the state health department for further identification, and *Francisella tularensis* was identified via PCR.

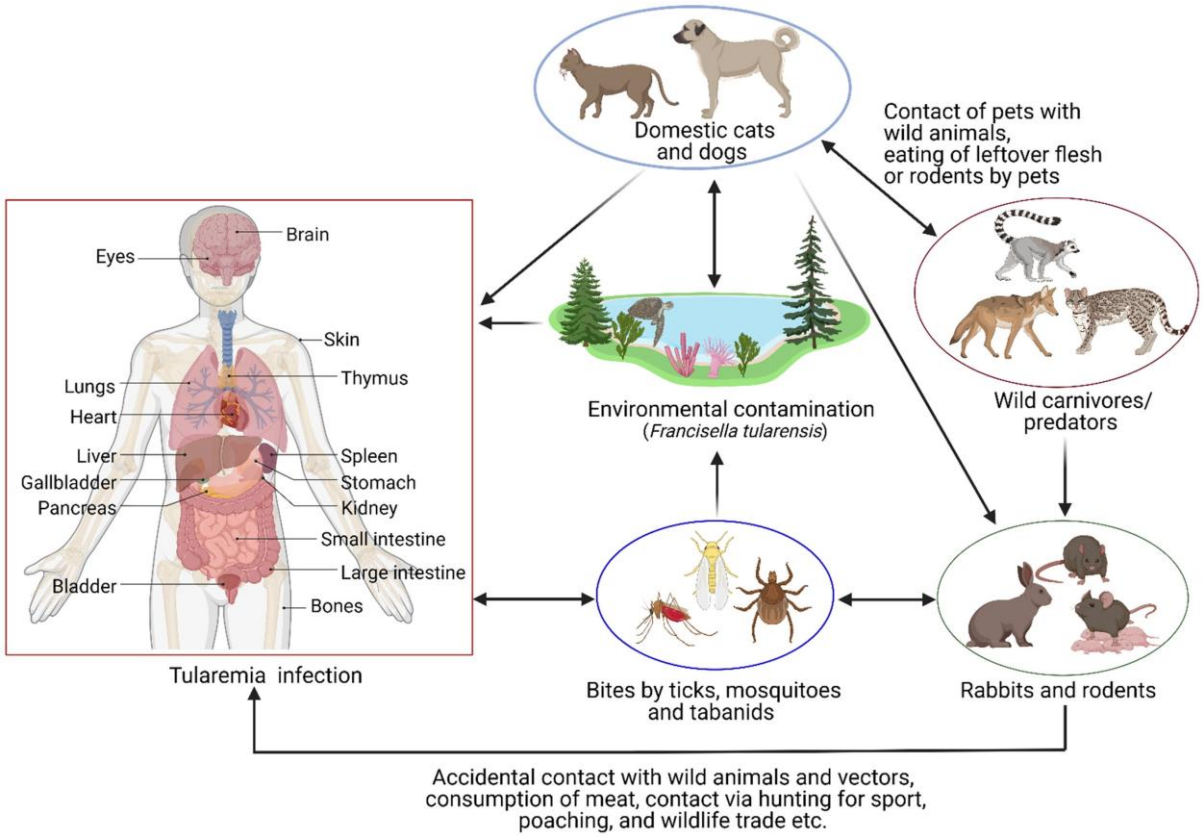
- The *F. tularensis* IgG drawn during his hospitalization also returned positive.

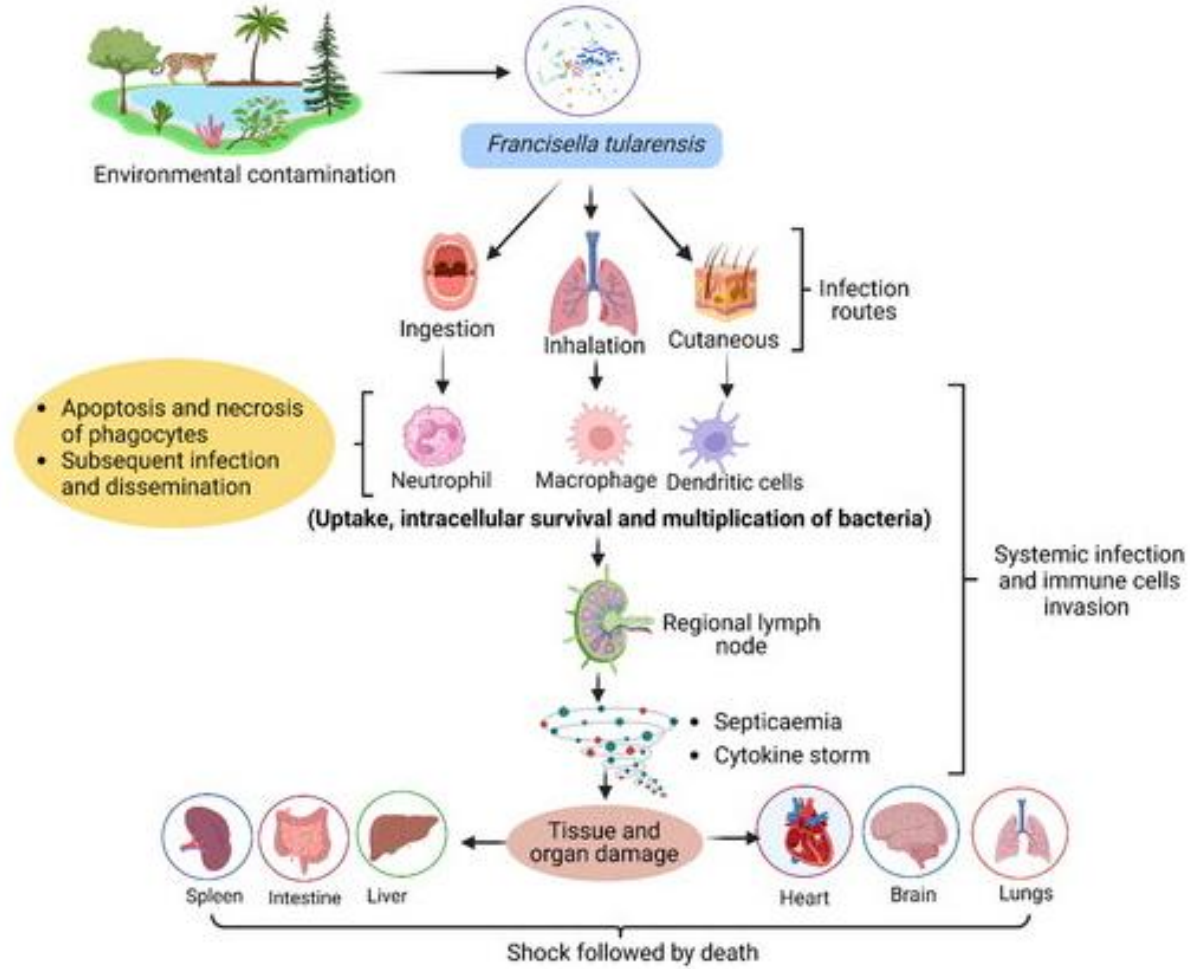
- Although he still had some residual symptoms, he declined re-admission for aminoglycoside therapy and was started on 10-day course of ciprofloxacin with near symptom resolution and interval reduction of pulmonary nodules on follow up CT chest.

A Wild Rabbit Chase: When Tularemia Hops into the Differential

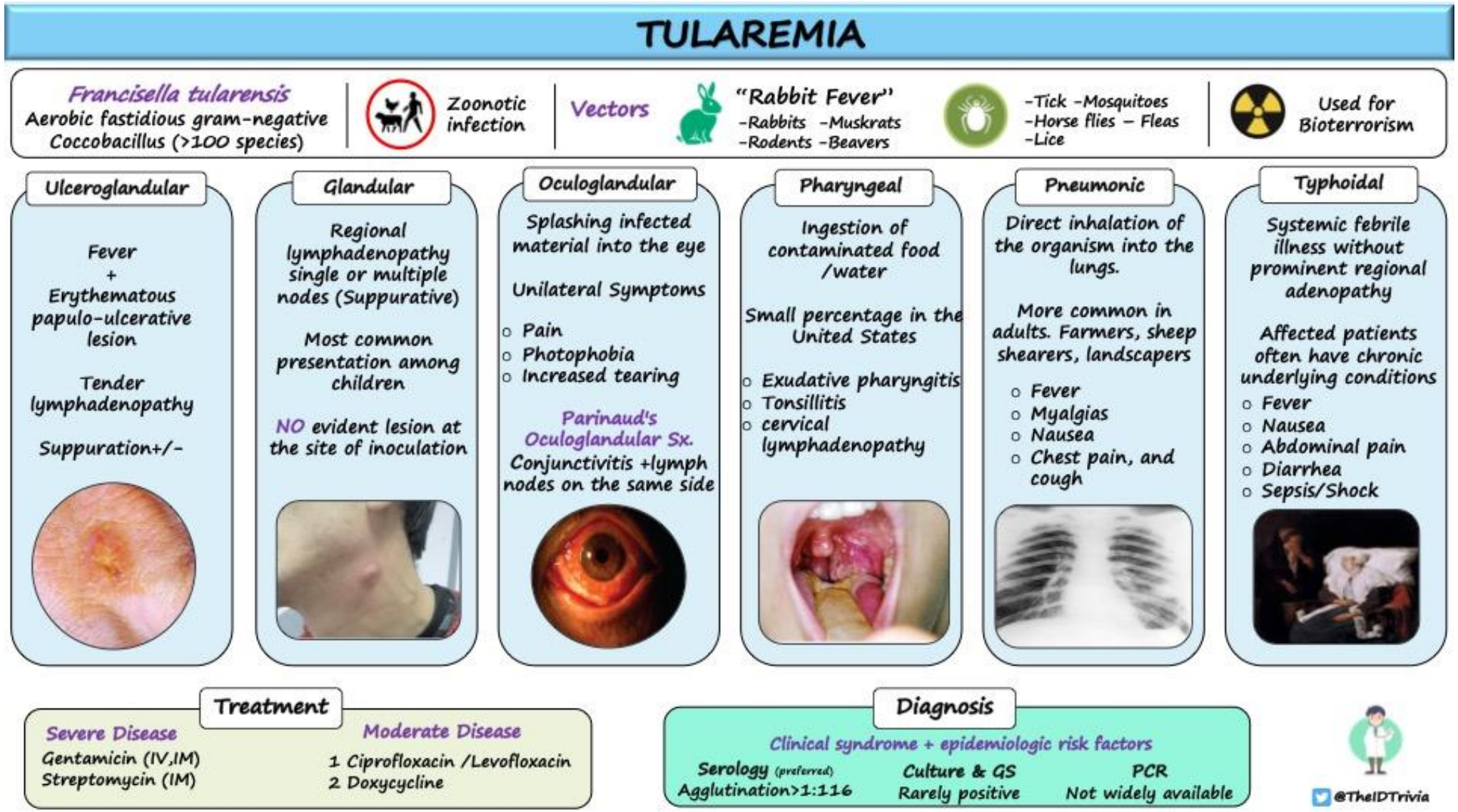
Mackenzie Kelley[1], Anam Habib, MD[2], Tasniem Tasha, MD[3], Cayleigh Blumrick, MD[2], Jennifer Wintringham, MD[4], Catherine Derber, MD[2]

[1]MD Program, [2]Division of Infectious Disease, [3]Department of Medicine, [4]Department of Dermatology, Eastern Virginia Medical School, Norfolk, VA

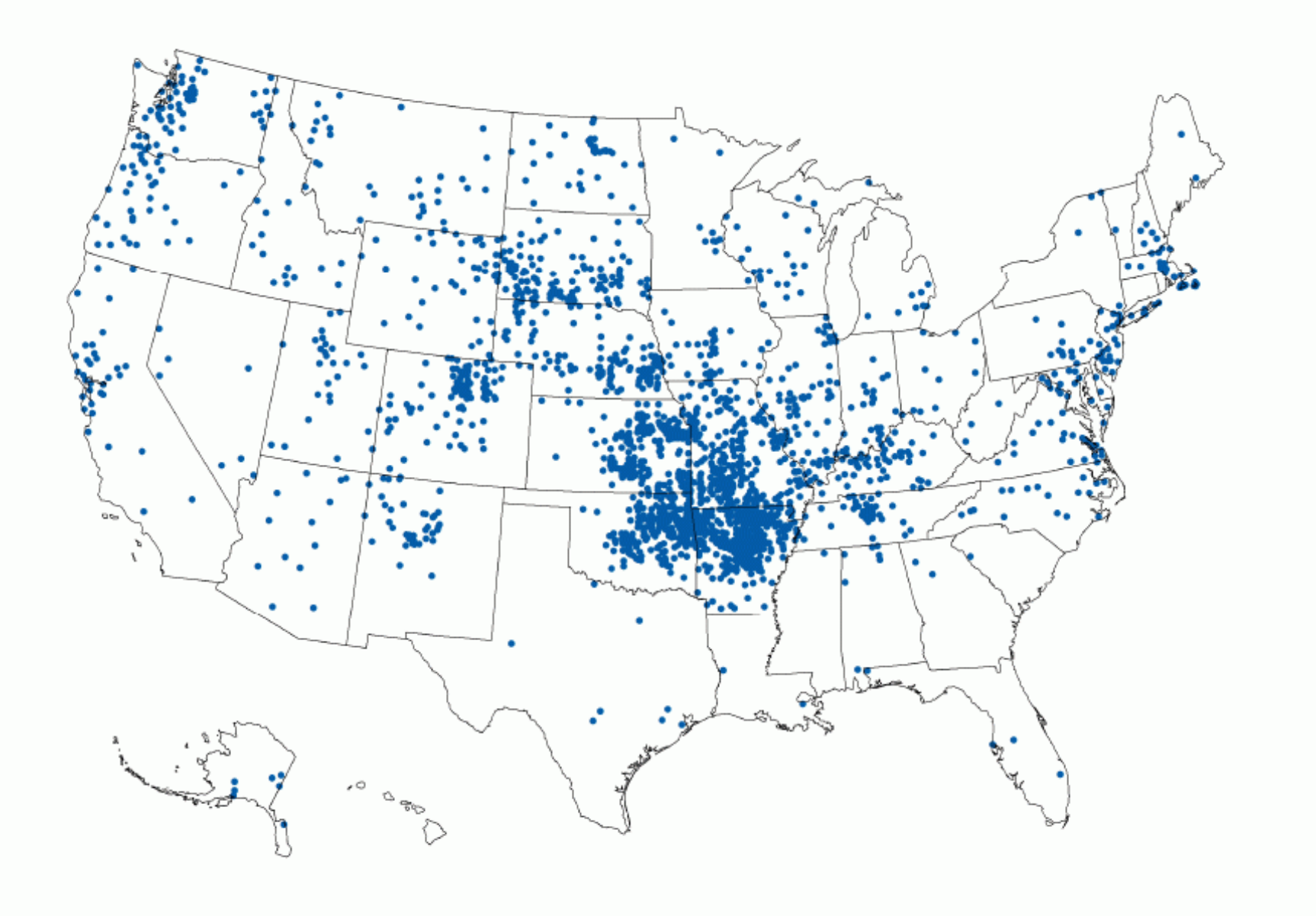




Sharma R, Patil ,Rajendra Damu, Singh ,Birbal, et al. Tularemia – a re-emerging disease with growing concern. *Veterinary Quarterly*. 2023;43(1):1-16. doi:10.1080/01652176.2023.2277753



Tularemia - Diagnosis and Management Summary Francisella ... GrepMed. February 22, 2022. Accessed April 6, 2025. https://grepmed.com/images/14463/diagnosis-management-tularemia-microbiology-treatment



Rich SN. Tularemia — United States, 2011–2022. *MMWR Morb Mortal Wkly Rep*. 2025;73. doi:10.15585/mmwr.mm735152a1

- Microbiology lab members should be alerted immediately with any concerns for tularemia due to the need for special culture media and biosafety precautions.

- Aminoglycosides remain gold standard therapy, though doxycycline or a fluoroquinolone may be prescribed for mild-moderate infections. This patient's partial response to doxycycline may be attributed to the higher rates of treatment failure and relapse associated with doxycycline compared to fluoroquinolones in the treatment of tularemia.

- While tularemia is uncommon in the Southeast US, and disseminated tularemia with primary skin lesions are rare, a high index of suspicion and a careful review of exposure history are essential for more rapid diagnosis and appropriate treatment.