

# ID GEMS

## Hidden Treasures and Traps in Geriatric Infectious Disease

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What is the effect of aging on infectious diseases?

Impact on health can be **huge!**

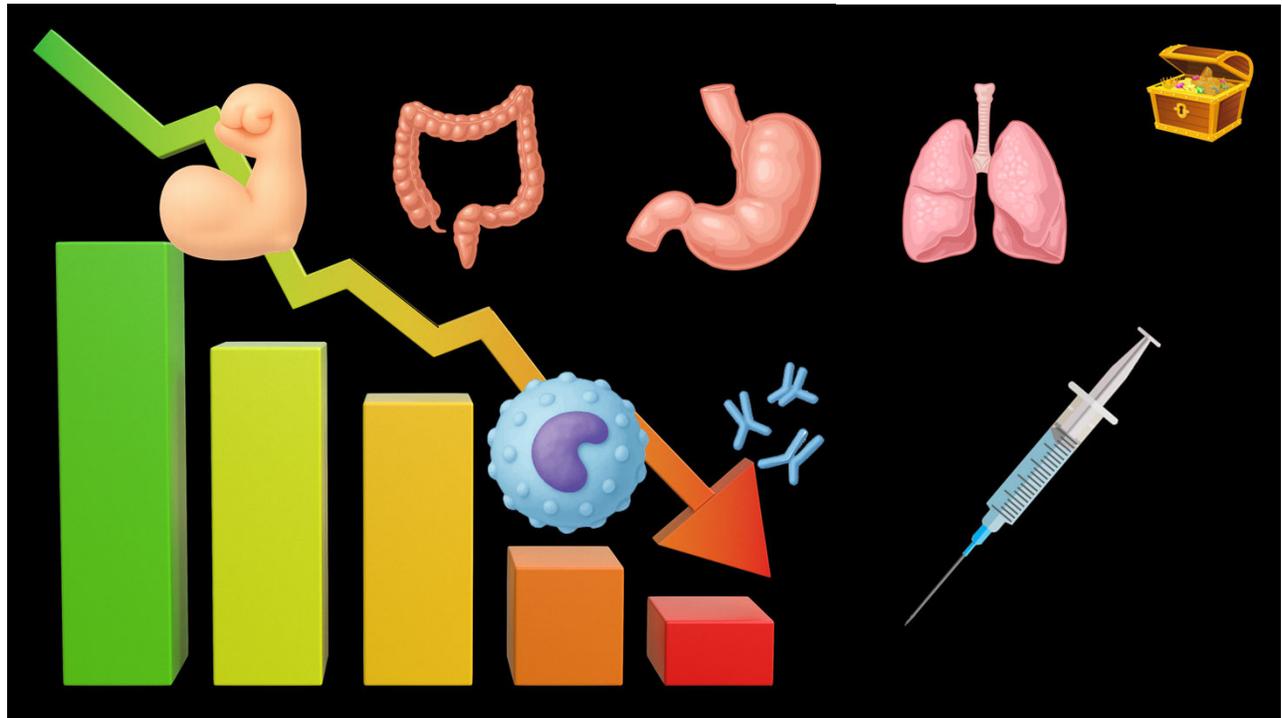
Co-morbid conditions

Immune senescence

Changes to clinical presentations

The background of this slide is a dark, blue-toned microscopic view of various pathogens, including a large, spiky virus particle in the center and several rod-shaped bacteria.

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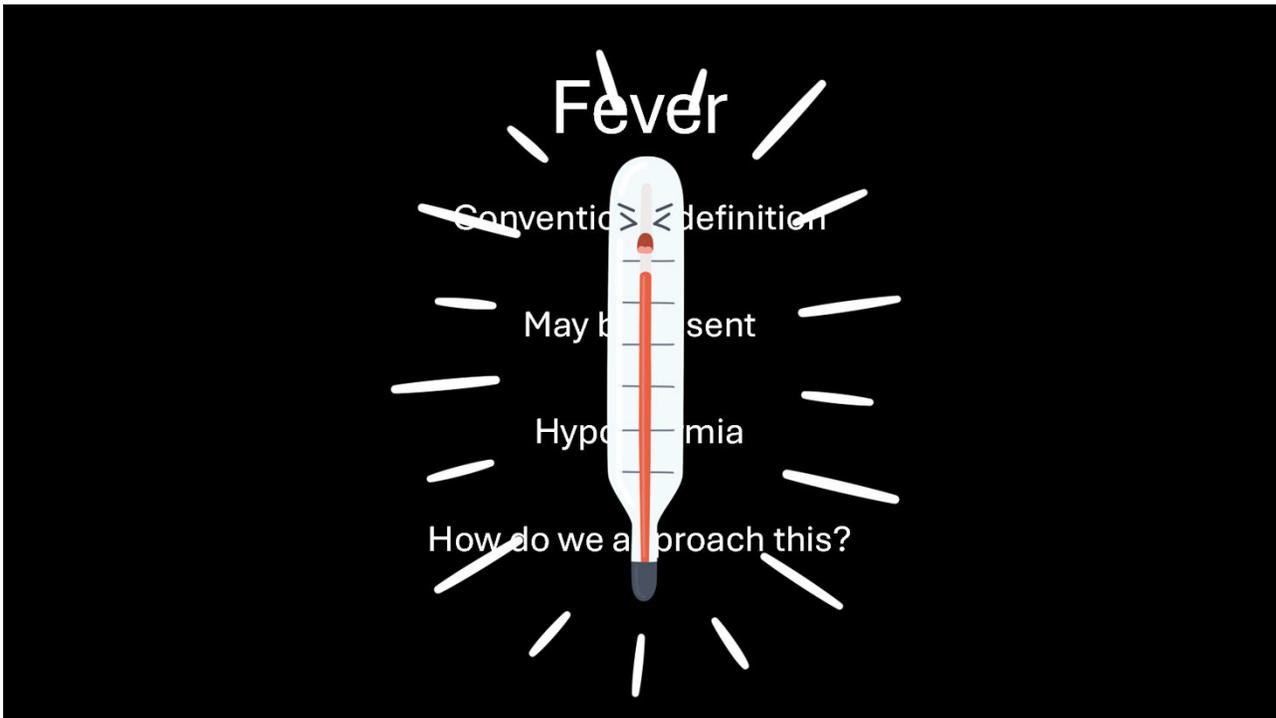
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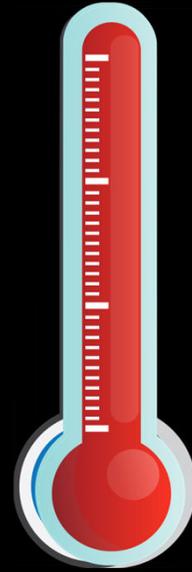
# Fever

Single oral temperature of  $>37.8$

Persistent of  $>37.2$

Rise of  $>1.1$  above baseline

Two or more  $<36.0$



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# Treasures and Traps



Immune senescence can change response to infection



Traditional definitions of fever may not apply



Hypothermia can be a sign of serious infection

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Urinary Tract infections

Most common

Recurrence

Asymptomatic bacteriuria!

A white line-art diagram of the human urinary tract, showing two kidneys at the top, two ureters leading down to a bladder, and a urethra at the bottom.

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# Challenges



Chronic symptoms  
Incontinence, frequency, or urgency

Dementia, cognitive impairment, AMS

Do we test them all?

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# Challenges



One positive on a dipstick

Does not correlate well to UTI

Especially in absence of symptoms



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# Approach




Consider the patient

Classic symptoms

Localizing signs and symptoms

Fever

Mental status changes

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# Management

The same as your general population

New IDSA guidelines for complicated UTI



*Escherichia coli*

*Klebsiella pneumoniae*

*Enterococcus faecalis*

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# Treasures and Traps



Evaluate for localizing signs and symptoms

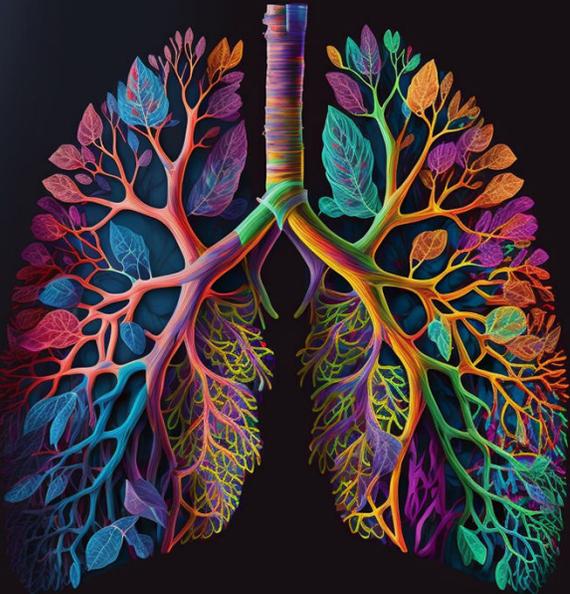


Anchoring on UTI in the setting of a fever or AMS



Treatment is the same, focus on common pathogens

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The diagram shows a pair of human lungs with a complex network of bronchi and capillaries. The bronchi are colored in a gradient from blue at the top to red at the bottom, and the capillaries are colored in a gradient from green at the top to purple at the bottom. The trachea is shown as a thick, blue, ribbed tube entering the lungs.

## Respiratory Infections

Pneumonia

Pathogens can differ

Higher risk for aspiration events

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## Respiratory Infections

*Streptococcus pneumoniae*

Gram Negatives

*Haemophilus influenzae*

*Legionella pneumophila*

*Moraxella catarrhalis*

*Klebsiella* species

Polymicrobial



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## Viral Infections

*Influenza*

*Covid-19*

*RSV*



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# Challenges

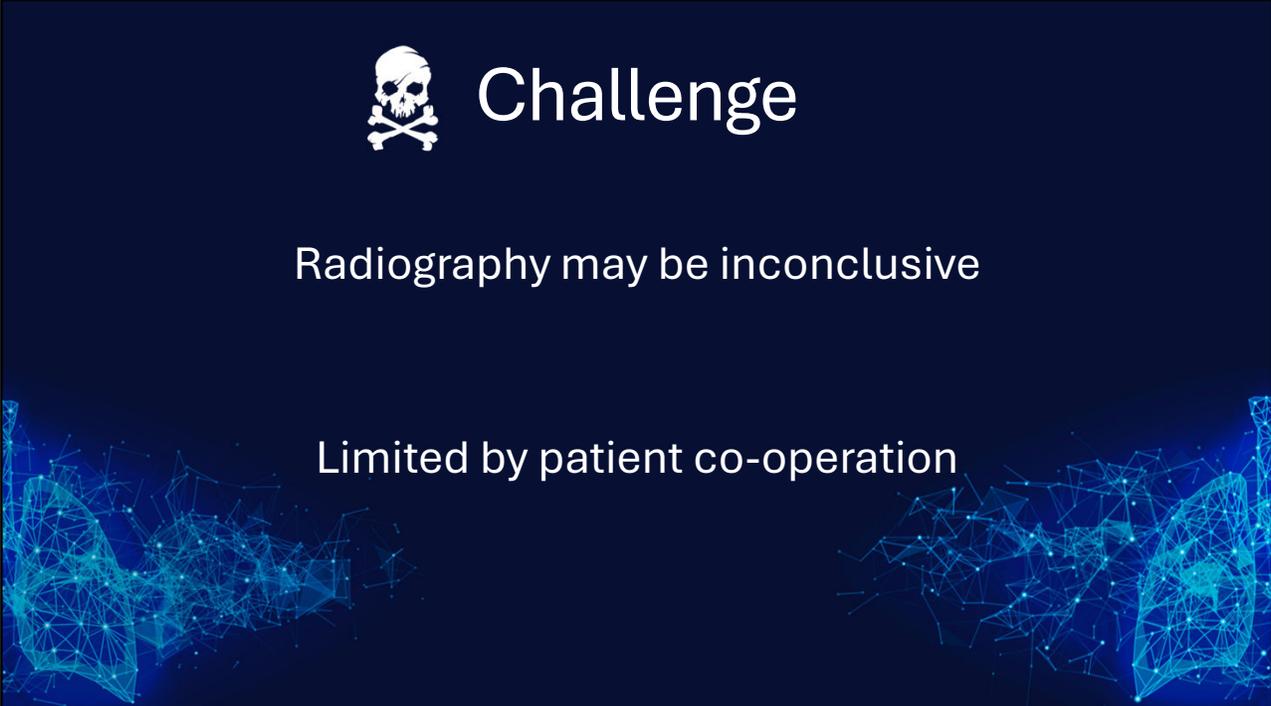
Patients often lack classic triad



Typical symptoms may not be robust

Symptoms can be atypical  
Generalized weakness, confusion,  
anorexia, falls

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# Challenge

Radiography may be inconclusive

Limited by patient co-operation

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## Approach

Clinical signs and localizing symptoms

Evaluate patient risk factors

Chest X-ray is inconclusive

Consider CT



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## Management



Similar to usual management

Consider risk for organisms:

Pseudomonas

MRSA

Enterobacter

Aspiration, positioning

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## Treasures and Traps



Classic triad often absent

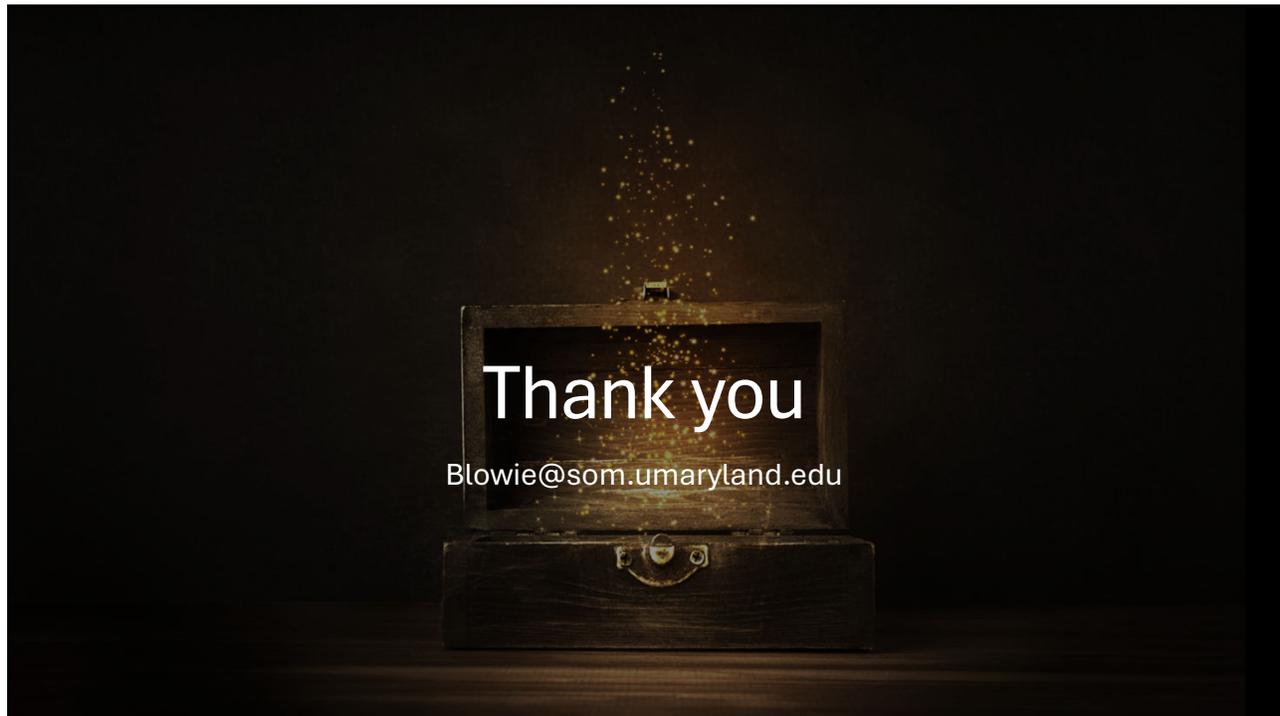


CT chest may be helpful when considering diagnosis



Management similar to general population but consider risk factors

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## Final Treasures and Traps



Immune senescence can change response to infection



Traditional definitions of fever may not apply



Classic symptoms of infection are often absent



Focus on localizing signs and symptoms