MANAGEMENT OF LTBI:
A PRIMARY CARE PERSPECTIVE

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General Internal Medicine

Questions?
Challenges?
Learning Objectives

- Evaluate and counsel a patient on the likelihood of activation of latent TB infection
- Explain what latent TB infection means in simple terms
- Address common patient concerns

Should we offer treatment?

- Likelihood of activation vs risk of treatment
- Assess likelihood of completion
  - pt commitment
  - resources for adherence
Providing some answers: www.tstin3d.com

<table>
<thead>
<tr>
<th>TST Size:</th>
<th>IGRA Result:</th>
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<tbody>
<tr>
<td>Select...</td>
<td>IGRA Not Done</td>
</tr>
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Age at immigration (if person immigrated to a low TB incidence country):

<table>
<thead>
<tr>
<th>Age:</th>
<th>N/A</th>
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<tbody>
<tr>
<td>Select...</td>
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Country of birth:

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<th>Select...</th>
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BCG status:

- Select...
- For more info, visit: BCG World Atlas.

Recent contact with active TB:

- No Contact
Please select all the conditions that currently apply to the patient:
(if none of these conditions apply, please leave boxes unchecked)

- AIDS
- Abnormal chest x-ray: fibronodular disease
- Chronic renal failure requiring hemodialysis
- Diabetes Mellitus (all types)
- Recent TB infection (TST conversion ≤ 2 years ago)
- Silicosis
- Tumor Necrosis Factor (TNF)-alpha inhibitors (e.g., Infliximab/Etanercept)
- Young age when infected (0-4 years)
- Abnormal chest x-ray: granuloma
- Carcinoma of head and neck
- Cigarette smoker (>1 pack/day)
- HIV infection
- Transplantation (requiring immune-suppressant therapy)
- Treatment with glucocorticoids
- Underweight (< 90% of ideal body weight or a body mass index (BMI) ≤ 20)

Below are the results for a patient with a Positive QFT Test, who is 40 years old, born in Ethiopia, immigrated at age 39, whose BCG status is Vaccinated age < 2 years, who has had no contact with active TB, and who can be characterized by:

- Cigarette smoker (>1 pack/day)
- Diabetes Mellitus (all types)

The likelihood that this is a true positive test (PPV) is: 98%

Risk of Activation

The annual risk of development of active tuberculosis disease is estimated to be 0.52%.

The cumulative risk of active tuberculosis disease, up to the age of 80, is: 20.78%

If treated with INH, the probability of clinically significant drug-induced hepatitis is 1.2%, and the associated probability of hospitalization related to drug-induced hepatitis is 0.2%.
How do you explain LTBI?

Pair/share

1) “sleeping” vs. “awake”

2) Ask what they know about TB to get a starting point

3) “little” vs. “big” infection

4) Explain about macrophages and granulomas
Always a good place to start

• What have you heard (or seen) about TB infection?
• What concerns do you have about treatment?
• What other questions do you have?

Common patient concerns about LTBI

1) Can I infect my family?
2) Will I be able to work?
3) Will I die of this disease?
4) Will my community shun me?
5) Why should I bother with treatment if I feel fine?
What else can I do to support adherence?

- Thoughtful regimen choice
- Choose DOT - but not if the DOT itself will be the barrier!
- Get creative with DOT, if you can
- “Good news” - incentives probably don’t matter

THANK YOU

QUESTIONS:
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