LTBI Management in Australia

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TB Control Governance

Australia has a decentralised approach to TB control due to its federated system of government.

TB surveillance and other national TB activities are overseen by the National Tuberculosis Advisory Committee (NTAC) which is comprised of representatives of all State and Territory Governments, the Australian Government and additional subject matter experts.

NTAC provides advice to the Australian Government on TB control issues and ensures a coordinated national approach to TB control through the development of national guidelines and strategies.

NTAC Website: http://www.health.gov.au/ntac

Epidemiology

- Australia has one of the lowest TB incidence rates in the world and has maintained excellent TB control since the mid-1980s.
- 85% to 90% of Australia’s annual TB notifications are detected in overseas-born residents. Most of these overseas-born cases would have been screened, and if positive, treated for active TB prior to migrating to Australia.
- Approximately 4% of Australia’s annual TB notifications are detected in children aged under 15 years.

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Recommended tests for LTBI diagnosis

NTAC’s draft recommendations:
- TST or IGRA can be used for the investigation of LTBI in most circumstances except TST is preferred for serial testing of HCWs.
- Neither TST or IGRA should be used in the investigation of active TB.

A revised NTAC Position statement on interferon-γ release assays in the detection of latent tuberculosis infection to reflect the above recommendation is due for publication in 2016.

Recommended LTBI Treatment

NTAC’s draft recommendations for LTBI treatment are:
- INH for 6 to 9 months for standard treatment of LTBI.
- RIF-INH for 3 months as an alternative therapy, in particular for treating LTBI in children.
- RIF for 4 months if there if INH intolerance occurs or resistance to INH is suspected/confirmed.

Recording and reporting LTBI management

Australia currently doesn’t record or report on LTBI management at the national level.

Only confirmed cases of active TB are notified to the National Notifiable Diseases Surveillance System (NNDSS).

To record and report LTBI cases nationally, State and Territory Governments and the Australian Government would need to agree on:
- Revising the surveillance case definition to include LTBI.
- Committing to increased resources to collect, record and analyse the additional data.
- A nationally consistent data set and the subsequent amendments to the NNDSS to facilitate receipt of this data.

Challenges

- Variances in surveillance system capability, resources, case numbers and local epidemiology between jurisdictions.
- The absence of cost-benefit evidence to support a programmatic approach to screening for LTBI.
- Finite resources.
- Mediocre diagnostics; toxic and lengthy treatment regimens.
- Balancing the benefits of treatment with potential harms.

Opportunities

- Interrupt transmission and further reduce Australia’s TB incidence rate.
- Provides a platform to encourage investment in research to improve diagnostics and treatment.

At-risk groups

At-risk groups routinely targeted for LTBI management:

- Contacts of active TB cases.
- HIV +ve persons.
- Persons commencing anti-TNFa therapy.
- Persons being considered for solid organ transplantation.
- Health Care Workers (HCWs).
- Migrating children aged 2 to 11 years are screened pre-migration.

Persons are screened with an intention to treat and those with a positive screening test are referred to a TB specialist to rule out active TB and consider LTBI treatment options.

Migrants are being considered as a group to undertake targeted screening (post-migration) in the future.

Selection practices

Contacts of active TB cases are categorised into three categories (high, medium, low). High risk contacts are screened first and an assessment made to screen lower risk groups depending on the evidence of transmission in the higher risk category.

HCWs are screened pre-employment and those with risk factors (i.e. born in, or worked in a high-incidence country) or those that work in high risk environments may have serial screening.

All persons that are HIV +ve, commencing anti-TNFa therapy or being considered for solid organ transplantation are screened for LTBI.

Selection practices for targeted screening may vary slightly between jurisdictions depending on local epidemiology and resource availability.

Progress towards a national approach

NTAC is currently drafting a National Position Statement for the management of LTBI in Australia to ensure LTBI management practices are consistent across jurisdictions.

State and Territory governments are responsible for the delivery of services to manage LTBI in their jurisdictions; and therefore are responsible for the implementation of a nationally agreed approach.

Resources

4. National Tuberculosis Advisory Committee: National Tuberculosis Advisory Committee Guideline: Management of Tuberculosis Risk in Health Care Workers in Australia; 2016 (Unpublished)

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