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Special Edition: WCHD TB Program Update

Introduction

As we have all struggled to handle COVID-19 these past 14 months, it is important to remember that every day 4,000 people die, and 27,000 people get sick world-wide with tuberculosis (TB). Although the United States saw a 20% decrease in cases (7,163) for 2020, diligence within our nation's health care system continues to be paramount in dealing with the global TB pandemic. As tuberculosis continues to ravage many parts of our world it is becoming resistant to medications and, if unchecked, could truly become a public health emergency in the US.

This recent statement from the CDC acknowledges the possibility that the decrease of US tuberculosis cases during 2020 may have been a result of the Covid-19 pandemic:

"The steep decrease in TB incidence during the COVID-19 pandemic might be the result of reduced transmission and undetected cases. Health care providers should consider TB disease in patients with signs and symptoms consistent with TB, and the public should be encouraged to seek medical care when needed. Timely TB diagnosis saves lives and prevents the spread of TB".¹

Throughout the years excellent screening and access to care and treatment have kept tuberculosis cases in the US low. The Washoe County Health District (WCHD) Tuberculosis Program continues to work closely with community health care providers in the identification, diagnosis, and treatment of patients to assure the rate of TB in Washoe County remains low.

Tuberculosis Program Priorities

The WCHD TB Program's primary mandate is to assure appropriate care and treatment for all active TB cases. The program coordinates care for active cases from the initial diagnosis, throughout the treatment phase, and for all post treatment follow up. While overseeing the care of active cases, the program also ensures that thorough contact investigations are completed.

The program also focuses on the assessment, diagnosis, and treatment of latent TB infection (LTBI) in **high-risk** populations. This includes immigrants, individuals with chronic health conditions, patients needing to take certain medications, those recently infected with TB, and children less than 5 years of age. The rate of progression to active TB in these groups is much higher so proper treatment of these cases is key to controlling TB in Washoe County. Primary care providers treat some of these high-risk patients while many are referred to the WCHD TB program for treatment.

Recommendations

The WCHD TB Program offers the following recommendations to Washoe County clinicians regarding evaluation of patients for TB.

Testing for TB infection can be done in two ways. For foreign born individuals, an IGRA (Interferon Gamma Release Assay) may be used. This includes **Quantiferon Gold Plus** or **T-Spot**. For US born individuals either an IGRA or TST (Tuberculin Skin Test) may be used.

1. "Think TB", **especially in foreign born individuals** or others who may be at risk for TB infection.
2. Remember TB can manifest in any part of the body. If you have a patient with TB risk and signs or symptoms including a mass, lymph-node swelling, or chronic pain- screen for TB.

3. Foreign born diabetics and those with renal disease are very high risk for active TB. Screen these patients for TB.
4. Patients needing to take certain medicines that suppress the immune system are very high risk for active TB. i.e. TNF-inhibitors, biologics, chemotherapy, high dose prednisone, etc. Screen these patients for TB.
5. Children under age 5 exposed to an active case of TB are of the highest priority for TB morbidity and mortality. WCHD TB program is usually aware of these children through contact investigations, however, a primary provider may know of an exposure before we do. Report these cases immediately.
6. Any Symptomatic individual should always be screened for TB.

Diagnosis & Testing

Screening for active TB will often include radiology, sputum collection, and collection of specimens from other areas of the body.

The following are key points to remember regarding specimens collected from other areas of the body.

Prior to biopsy procedure, order an IGRA for individuals with risk factors for TB exposure. If the IGRA is positive or suspicion for TB is high with a negative IGRA, order a separate biopsy specimen that will need to be placed in saline. *[Specimens placed in formalin cannot be used for TB diagnosis or AFB (acid fast bacilli) culture].*

Lymph node biopsies should be excised as a full node or partial node and should include all layers of the lymph node to increase the yield. Once collected, these specimens would be evaluated for AFB by smear and culture. Tissue is most likely to be smear negative for AFB. This does not rule out tuberculosis. PCR/NAAT testing can also be performed on these specimens to increase the specificity for TB.

Private labs such as Quest Diagnostics and LabCorp offer PCR/NAAT testing on all specimen **sources**. The Nevada State Public Health Lab requires prior authorization to do PCR/NAAT testing on extra-pulmonary specimens. Contact the WCHD TB Program to help coordinate this testing.

Primary TB goal with specimen collection: When a specimen is collected properly, TB can be confirmed by culture and susceptibilities will ensure proper treatment.

WCHD TB program staff wish to thank the providers in Washoe County for the work they have done to address TB locally. We look toward to the future as we all work together to identify and treat TB, ultimately making our community a safer place to live.

Reporting

The WCHD TB Program is available as a resource and encourages calls from the community regarding any question or concern related to TB. Please contact us at 775-785-4785 or fax reports to 775-785-4737.

The list of reportable communicable diseases and reporting forms can be found at:

<http://tinyurl.com/WashoeDiseaseReporting>

Report communicable diseases to the Washoe County Health District. To report a communicable disease, please call 775-328-2447 or fax your report to the WCHD at 775-328-3764.

Acknowledgement

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References

1 Centers for Disease Control and Prevention. Morbidity and Mortality Weekly report. (MMWR) Weekly / March 26,2021 / 70(12);409-414