



Clinical Practice Change: Clinical Microbiology

Date: April 8, 2013

To: WRHA Respiratory and ID Doctors, FNIHB Nursing Stations, Thompson and Brandon Doctors

From: Dr. Michelle Alfa, Medical Director Clinical Microbiology Discipline, Diagnostic Services of Manitoba

Michelle Alfa

Re: Follow-up Testing for Patients Known to have Tuberculosis (TB) who are Smear Positive

Take Home Message: Effective: April 15, 2013 – All follow-up specimens from known TB patients (**inpatients only**) will only have AFB smears performed; **culture will NOT be done.**

Issue:

Because of recent outbreaks, the Microbiology laboratory is over capacity for its automated TB instruments. Each respiratory specimen is incubated for 6 weeks in the automated TB instrument. There have been times when samples have had to be taken off the TB instrument at 5 weeks incubation because of this over capacity situation. Approximately 2% of TB cultures become positive between week 5 and 6, so removing cultures at week 5 is not an optimal approach and is only done as a “last resort” when there is no other choice.

In an effort to reduce “over capacity” situations in the automated TB instruments, we are proposing that follow-up **respiratory specimens for inpatients** would get AFB smear results but would not have culture routinely performed. This would free up a number of slots in the TB instrument as currently all follow-up specimens are getting culture with little to no added benefit to the management of the TB patient. Currently there is low compliance with the “Follow-up protocol” (i.e., culture of only one of the three follow-up samples collected from inpatients). A revised process/protocol (below) will become effective that supports compliance with the protocol and supports efficient use of resources.

Revised Process:

- All first time diagnostic specimens for inpatients and outpatients will have **AFB smear and culture** performed (i.e. no change in this process).
- All follow-up specimens from known TB patients (**inpatients only**) will have AFB smear performed **but culture will NOT be done**. Please be sure to indicate “Follow up” in the clinical details on the requisition accompanying the respiratory specimen on such patients. *NOTE: If clinical features for the inpatient (e.g. failure to respond to therapy) warrant culture, the physician is given the option of contacting the lab to request culture on any follow-up respiratory specimen that was not originally cultured. The lab will retain the processed sputum specimen concentrate for 6 weeks in case culture is needed.*
- All respiratory specimens submitted from **outpatients** known to have TB will have **AFB smear and culture** performed (i.e. no change to this process). If for some reason these patients are re-admitted, it is important to note on the requisition if the specimen is the 2 month diagnostic or the 6 (or 12 month) test of cure diagnostic specimen as this will ensure that the culture is done despite the fact that they are inpatients. Simply ensure that the term: “Diagnostic” is written under clinical details on the requisition.

The wording on the patient laboratory report for follow-up AFB smear respiratory specimens will be:

“Patient known TB positive, no culture performed. Please contact the HSC Mycobacteriology lab (204 787-7652) if culture is needed (e.g. failure to respond to therapy, 2 month follow-up or test of cure specimen).”

If you have any questions or require further information, please contact Dr. Michelle Alfa at 204-237-2105.