

## Monitoring the Intake of Nontuberculous *Mycobacteria* from Drinking Water by Use of Stool Specimens as an Additional Sample in Studies Involving Possible Dissemination of NTM *Mycobacteria* to become a Potential Pulmonary Infection in COPD Patients

*“The gastrointestinal tract is an important anatomical site for monitoring the intake of NTM *Mycobacteria* from drinking water in COPD Patients”.*

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### COLUMN ARTICLE

The presence of Non-Tuberculous *Mycobacteria* (NTM) *Mycobacteria* have been reported in many countries as opportunistic pathogens in AIDS patients [1]. More recently, NTM *Mycobacteria* have become important opportunistic pathogens in patients with Chronic Obstructive Pulmonary Disease (COPD) [2,3]. An important source of these potentially life threatening NTM *Mycobacteria* has been from drinking water supplies.

In AIDS patients, disseminated NTM *Mycobacterium* infections have been frequently observed in a variety of extra-pulmonary sites such as the gastrointestinal tract [4]. Stool samples from these AIDS patients have often revealed the presence of Acid-Fast Bacilli. Non-tuberculous *Mycobacteria* have successfully been isolated from contaminated stool specimens in AIDS patients utilizing a technique known as paraffin slide culture [5,6].

Paraffin wax utilization or baiting of *Mycobacterium avium* organisms and other 'NTM *Mycobacteria*' and the inability *Mycobacterium tuberculosis* and TB complex organisms to not be able to utilize paraffin wax as a carbon source in a basal salt media where the paraffin wax is a sole carbon [5,6]. This is a known if not forgotten fact [5]. Few organisms have this ability to utilize paraffin wax as a sole carbon source. To further enhance the system, a cocktail of antibiotics (which can be prepared in house) are added to the system prior to inoculation with a patient specimen [5,6]. Thus, this system has a low risk of contamination, and very useful in monitoring *Mycobacterial* Pathogen presence in stool.

The gastrointestinal tract is therefore an important additional anatomical site for monitoring the intake of NTM *Mycobacteria* from drinking water in COPD Patients. Thus, stool specimens should also be included in addition to sputum specimens for studying the acquisition of NTM *Mycobacteria* in patients with COPD!!

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