

## Publication details

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1. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)

### **The Role Of Culture In Diagnosing Smear Negative Tuberculosis In HIV Seropositive Patients.**

<http://www.iosrjournals.org/iosr-jdms/papers/Vol7-issue3/B0730812.pdf>

**Abstract:** Sputum microscopy, the most commonly practiced tuberculosis (TB) diagnostic test is less sensitive in immunocompromised patients due to low bacillary load. The study was carried out in a tertiary care general hospital during 2010-12 in Mysore, Karnataka, to diagnose smear negative TB in HIV patients by culture technique. Of 416 HIV patients, 162 patients with features of pulmonary/extrapulmonary TB but smear negative were included in the study. Sputum, stool, blood and other relevant clinical samples except blood were processed as per standard protocol. The blood collected with sodium citrate was processed by lysis centrifugation. All samples were inoculated onto Lowstein Jensen slants and incubated at 37°C for 6 to 8 weeks. Of 162 HIV patients, 67(41%) were found to have TB. Extrapulmonary TB (25%) was more common than pulmonary TB (13%). Mycobacteria were recovered in 76 samples (26 sputum, 12 stool, 18 blood, 7 pleural fluid, 1 CSF, 9 FNAC, 1 ascitic fluid, 1 pus, 1 ear discharge). *M.tuberculosis* (95%) was the predominant species isolated followed by *M.avium* complex (5%). Most HIV patients with TB are left undiagnosed for reasons of no advanced/high cost techniques in resource constrained settings. Thus culture could be used as a tool in diagnosing smear negative TB.

1. Indian J Dermatol Venereology Leprology

**Net Letter:** A study of candidiasis in HIV reactive patients in a tertiary care hospital, Mysore - South India

<https://www.ijdv1.com/text.asp?2014/80/3/278/132271>

### **2. Lung India**

Drug resistance pattern of mycobacterial isolates in HIV and non-HIV population in South India

<https://www.lungindia.com/text.asp?2016/33/1/27/173054>

**Background:** Emergence of drug resistance has complicated the treatment of tuberculosis (TB). WHO reports India to be one among 27 “high burden” multidrug-resistant (MDR) TB countries. **Objective:** To diagnose TB and detect drug resistance of mycobacterial isolates in acid-fast bacilli (AFB) smear negative HIV reactive patients (Group A) and compare them

with HIV seropositive AFB smear positive (Group B) and HIV-seronegative AFB positive cases (Group C).

**Materials and Methods:** Clinical specimens collected in all groups were processed as per the standard protocol except blood, which was processed by lysis centrifugation technique. They were then inoculated with Lowenstein-Jensen media and the isolates obtained were subjected to drug susceptibility test (DST) by proportion method and genotype MTBDR plus assay.

**Results:** In Group A, 162 patients were included. Of the 443 clinical samples collected, 76 mycobacterial strains were obtained from 67 (41%) patients. Of these, 50 (65.8%) were sensitive to all drugs and 26 (34.2%) resistant to one or more anti-tubercular drugs. Antibiogram of Group A when compared with Group B and C showed that the MDR rate 6.6%, 6.7% and 8% respectively) did not differ much; but resistance to at least single drug was (26 [34.2%], 3 [10%], and 8 [16%]), respectively. **Conclusion:** Our study suggests that HIV has no influence on the anti-tubercular resistance pattern, but increased MDR rate along with HIV in high TB burden setting stresses the need for early diagnosis and DST in providing proper regimens and improve prognosis.

### 3. Indian Journal of Dermatology

[http://www.e-ijd.org/article.asp?issn=0019-5154;](http://www.e-ijd.org/article.asp?issn=0019-5154)

#### **Antifungal resistance of candida species isolated from HIV patients in a tertiary care hospital, Mysuru, Karnataka**

**Context:** Candidiasis still remains as a common opportunistic infection in patients with human immunodeficiency virus (HIV). Drug resistance has become a serious health concern because of indiscriminate usage and dosage. **Aim:** To determine the antifungal resistance pattern of *Candida albicans* and non-albicans Candida (NAC) from HIV patients. **Subjects and Methods:** The study was carried out in the department of microbiology at a tertiary care hospital. Candida isolates obtained from HIV patients were tested for drug susceptibility by Vitek-2 automated system. **Results:** Antifungal susceptibility pattern (n=109) revealed that 15% of the isolates were resistant to at least one and 85% were sensitive to all the drugs tested. About 10% and 19% of *C. albicans* showed resistance to fluconazole and flucytosine respectively. Among non-albicans tested, only *C. tropicalis* (14%) exhibited resistance to flucytosine. **Conclusions:** Knowledge on epidemiology, species prevalence, and drug resistance pattern may guide for effective therapy. This reduces morbidity and also improves the quality of life.