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Observation : The most consistent component is the foamy macrophages in sheets, interspersed by numerous neutrophils. Oedema was a prominent feature, more in the upper dermis. Blood vessels were dilated and congested. Vasculitis was also present. Highly fragmented acid-fast bacilli were seen in the macrophages and nerves in small numbers.

Conclusion : In half the biopsy specimens, typical histology of ENL was not present.

MICROBIOLOGY

- **UTILIZATION OF PARAFFIN SLIDE CULTURE METHOD FOR ANTIBIOTIC SENSITIVITY TESTING OF NON TUBERCULAR MYCOBACTERIA.** DK Mendiratta, Rahul Narang, S Battacharya, Sangeeta Dey, P Narang, RA Ollar, VIIIth Maharashtra Chapter Conference of IAMM, Seth GS Medical College & KEM Hospital, Mumbai, 27-29th September, 2002

Non tubercular mycobacteria can utilize paraffin wax as the sole carbon source in basal medium. Paraffin slide culture (PSC) has been employed for isolation and speciation of NTM from clinical sources. The present study was undertaken to evaluate its utility in antimicrobial sensitivity testing of NTM. Six isolates of *Mycobacterium avium* complex and 2 isolates of *M. fortuitum* along with one control strain of *M. avium* complex were tested against rifampicin, streptomycin, ethambutol, ofloxacin, ciprofloxacin, amikacin and azithromycin by PSC and compared with sensitivities obtained with broth microtitre plate procedure and LJ method (Ollar RA 1991 & TRC manual 1987).

The MIC in PSC was defined as the lowest concentration of antimicrobial agent necessary to inhibit growth on paraffin wax coated slides. With PSC, the MIC values were determined at the time when the corresponding control tubes showed confluent growth. The MIC 50 and MIC 90 values

obtained from PSC assay and LJ correlated well for all the drugs, but this correlation was less with microtitre broth dilution assay. The PSC could be performed rapidly over duration of 8 days.

- **COMPARATIVE STUDY OF ISOLATION OF MYCOBACTERIUM TUBERCULOSIS BY ROUTINE LJ METHOD AND RADIOMETRIC BACTEC 460 TB SYSTEM.** Kanchan Bhutada, Rahul Narang, DK Mendiratta, P Narang, VIIIth Maharashtra Chapter Conference of IAMM, Seth GS Medical College & KEM Hospital, Mumbai, 27-29th September, 2002

BACTEC 460 TB system, a radiometric culture technique for isolation, identification and DRT of mycobacteria, is extensively used in the developed nations. To assess the utility of this system in our set up a comparative study was performed between routinely used Lowenstein Jensen's medium and BACTEC 460 TB system. A total of 94 specimens received between 1st January 2001 to 31st December, 2001 from suspected pulmonary (n=52) and extra pulmonary (n=42) tuberculosis patients were included in the study. Various clinical samples viz. sputum, pus, tissue, aspirates, urine, bone marrow were inoculated on 2 slopes of LJ medium and a BACTEC vial containing 12 B liquid medium plus PANTA after smear examination. In pulmonary tuberculosis the isolation by BACTEC over LJ was statistically significant ($p < 0.01$). This difference was significant for smear negative cases only. In extrapulmonary tuberculosis LJ proved to be better but the difference was not statistically significant. Average detection time was 11.8 and 11.6 days by BACTEC and 25.2 and 21.1 days by LJ for pulmonary and extrapulmonary specimens respectively.

It is concluded that BACTEC 460TB system is more sensitive for smear negative pulmonary TN and is certainly a rapid method.

- **NTM - CAN WE AFFORD TO BE COMPLECENT.** P Narang, VIIIth Maharashtra

Chapter Conference of IAMM, GS Seth Medical College & KEM Hospital, Mumbai, 27-29th September, 2002

There are over 82 species of Mycobacteria recognized by CDC on the basis of HPLC analysis of specific mycolic acids and all mycobacteria other than *M.tuberculosis* complex and *M.leprae* are grouped as non-tuberculous mycobacteria (NTM), earlier known as atypical or anonymous mycobacteria. They have been known since Robert Koch discovered *M.tuberculosis* but because of their ubiquitous nature and low virulence they never received much importance.

By 1980, only 24 cases of NTM had been reported world wide, but since 1982 there has been a dramatic increase in the reports associating them with diseases. A concurrent epidemic of NTM particularly *M.avium* intra cellulare complex (MAC) and AIDS seems to be on in Western countries. In USA the incidence of disseminated NTM infections increased from 5.5% in 1981-87 to 7.6% in 1990 and today almost 50% of all AIDS patients are infected with NTM, of which 20-25% are diagnosed during life and the rest 50% on autopsy. In developing countries the situation is different. *M.tuberculosis* is still the most important mycobacterial infection and for the same reason there is tremendous paucity of data on NTM because no one is seriously looking out for them in AIDS or non AIDS patients. In India also, we have all the prerequisites necessary for host parasite relationships. Our environment is full of NTM species and there is also no dearth of immuno compromised individuals.

In MGIMS, Sevagram NTM have been isolated from Blood (8.5%) and stool(7.5%) samples of only HIV seropositive cases. These are preliminary studies, but they reflect clearly that even in our country there is a need to keep the possibility of these infections in mind particularly when dealing with AIDS cases. The sentiment that MAC and other NTM disease does not exist in India may no longer be true. In view of AIDS explosion in India, NTM in future are going to be important

and data must be generated and disseminated both at clinical and laboratory levels.

COMMUNITY MEDICINE

- **KAP OF KEY BEHAVIOUR INFLUENCERS REGARDING HEALTH PROBLEMS WITH EMPHASIS ON ANAEMIA IN ADOLESCENT GIRLS.** BS Garg, PV Bahulekar, S Varkey, A Dongre, XXIX Annual Conference of IAPSM, MGIMS, Sevagram, Feb 2002

Survey was conducted to find out the knowledge, attitude and practices of the behaviour influencers regarding health problems and anaemia in adolescent girls in tribal, non tribal areas of Nashik district as well as urban slums.

This was a cross sectional study conducted in 90 clusters in Nashik district. Lady teachers, ANMs/AWWs, mothers, lady panchayat members were participants of this study. In urban areas, lady ward members were interviewed instead of panchayat members. The study was conducted in 4 tribal and 4 non-tribal blocks of Nashik district as well as urban slums covered by UNICEF Project. Trained Social Investigators conducted interviews in each cluster with the help of a pre-designed and pre-tested questionnaire. Data so collected was analyzed using EPI Info Software. The three important health problems among adolescents responded by all informants were abdominal pain, backache and irregular menstruation. The knowledge regarding anaemia was good among teachers, ANMs and AWWs, but so among mothers and panchayat members. Skill in diagnosis and treatment of anaemia was better in ANMs as compared to AWWs, suprisingly both strongly believed in tonics for treatment of anaemia.

- **DISTRICT SCHOOL HEALTH EDUCATION PROGRAM: AN EVALUATION.** SS Gupta, PR Deshmukh, N Narula, A Khatri, BS Garg, XXIX Annual Conference of IAPSM, MGIMS, Sevagram, Feb 2002