

DEPARTMENT OF MICROBIOLOGY, RIMS, RANCHI

LISTS OF INVESTIGATIONS AVAILABLE

CLINICAL BACTERIOLOGY

❖ Microscopy

- **Gram staining**
 - ✓ Pus
 - ✓ Respiratory specimens
 - ✓ Corneal smear
 - ✓ Different swabs
 - ✓ Body fluids etc.
- **Albert staining** for *Corynebacterium diphtheriae*

❖ Bacterial culture

- ✓ Pus
- ✓ Respiratory specimens
- ✓ Corneal smear
- ✓ Different swabs
- ✓ ET aspirate
- ✓ BAL
- ✓ Body fluids
- ✓ D-J stent etc.
- ✓ Urine
- ✓ PCN fluid
- ✓ Semen etc.

❖ Blood/Body Fluids/CSF Culture

- **Automated culture (BACTEC)**
 - BACTERIA
 - FUNGI (yeast only)
 - ✓ Blood
 - ✓ CSF (microscopy; India ink preparation)
 - ✓ Sterile body fluids (including vitreous tap etc.)

❖ Enteric

- Bacterial culture and antibiotic susceptibility testing of
 - ✓ Stool

- ✓ Faecal swabs
- ✓ Rectal swabs
- ✓ Jejunal biopsy etc.
- HDP (hanging drop preparation) for cholera

❖ **Antibiotic Susceptibility testing with MIC (both conventional and automated by BD-PHOENIX)**

PARASITOLOGY

- R/E of Stool
- Peripheral Blood Smear
 - ✓ Malarial parasite
 - ✓ Filarial parasite
- Modified acid fast staining of stool for
 - ✓ Cryptosporidium spp.
 - ✓ Isospora spp.
 - ✓ Cyclospora spp.
- Splenic smear and bone marrow smear for detection of LD bodies- referred cases.
- rk 39 for detection of Kalazar
- Rapid test for malarial parasites

MYCOLOGY

- Smear microscopy (KOH preparation, LCB mount)
- Fungal culture and Identification up to species level
 - ✓ Pus
 - ✓ Skin scraping
 - ✓ Hairs and nails
 - ✓ Corneal smear
 - ✓ Vitreous tap
 - ✓ Ear discharge
 - ✓ CSF
 - ✓ Other body fluids etc.

MYCOBACTERIOLOGY

❖Mycobacteriology

- Smear microscopy for AFB
 - ✓ Sputum
 - ✓ Pleural fluid
 - ✓ Gastric lavage
 - ✓ BAL
 - ✓ FNAC
 - ✓ Impressions smear
 - ✓ Smear microscopy for Gonococcus
 - ✓ Extra pulmonary samples etc.
- **Automated culture for mycobacterium (BACTEC- MGIT) from**
 - ✓ Sputum
 - ✓ Endometrial tissue
 - ✓ Pleural fluid
 - ✓ Gastric lavage
 - ✓ BAL extrapulmonary samples etc.
- **Susceptibility testing for first line Antitubercular drugs**
- **CB- NAAT/ Gene X-pert**

BACTERIAL SEROLOGY/ IMMUNOLOGY

- Widal test (Quantitative)
- ASO titre
- CRP
- RA factor
- Blood grouping
- Toxoplasma IgM Ab
- Toxoplasma IgG Ab
- Mantoux test
- STD (Sexually transmitted diseases)
 - ✓ RPR/ VDRL

VIROLOGY

• HbsAg	• HAV IgM Ab
• Anti HBc Total Ab	• HSV I IgM Ab
• Anti HBc IgM Ab	• HSV II IgM Ab
• HBeAg	• Dengue IgM Ab
• Anti HBs Ab	• Dengue NS1 Ag
• Anti Hbe Ab	• Chikungunya IgM Ab
• Anti HCV Ab	• Japanese Encephalitis IgM Ab
• HIV (Ag & Ab) 4 th Generation	• Measles IgM Ab
• Rubella IgM Ab	• Mumps IgM Ab
• Rubella IgG Ab	• Varicella Zoster IgM Ab
• CMV IgM Ab	• Parvo B-19 IgM Ab
• CMV IgG Ab	• Rotavirus Faecal Ag
• HBV Viral Load	• Epstein barr virus IgM Ab
• HEV IgM Ab	• HDV Total Ab

ICTC (INTEGRATED COUNSELING AND TESTING CENTER)

- **HIV – Counseling and Testing**

TO BE STARTED IN FUTURE :-

- Antifungal Susceptibility testing
- HCV Viral Load
- HIV Viral Load
- Scrub Typhus IgM Ab
- Leptospira IgM Ab