

SUMMARY

In the present work, bacteria were isolated from the urine of the patients suffering from urinary tract problems in Mayo Hospital Lahore visiting during July 2005 to June 2006 by inoculating the urine were studied on petriplates containing CLED agar. The colonies developed after incubation was used for the identification on the basis of colony, morphological and biochemical characteristics.

The isolates were identified as *Escherchia coli*, *Pseudomonas aeruginosa*, *proteus mirabilis*, *Proteus vulgaris*, *Klebsiella oxytoca*, *Klebsiella pneumoniae* and *Staphylococcus epidermidis*. The maximum number of bacteria isolated both in male and female patient was *E. coli* followed by *Pseudomonas aeruginosa*.

Out of the 255 cases studies, 125 were male patients while 130 were female patients. In total 76 (29.8%) showed growths in their urine and among these 28 (36.8%) were male and 48 (63.8%) were female patients. Indicated that the incidence of infection is higher in female.

For studying the sensitivity profile of the bacterial isolates against antibiotics, the antibiotic disc with different potency were used for the following antibiotics Amikacin (30µg), Kanamycin (30µg), Gentamycin (10µg), Ceftriaxone (30µg), Tazocin (110µg), Aztreonam (30µg) Paratam (105µg), Cephalixin (30µg), Fortum (30µg), Cephradin (30µg), Cefuroxime (30µg), Lincomycin (2µg), Fusidic acid (10 µg), Augmentin (30µg), Ceclor (30µg), Doxyclycine (30µg), Maxipime (30µg), Ciprofloxacin (5µg), Amoxycillin (25µg). Zone of inhibition was measured in mm by a ruler.

In most of the cases, Ceftazidime, Tazocin, Aztreonam, Gentamycin, Amikacin, Maxipime, Augmentin, Ceclor, Ciprofloxacin, Fusidic acid were the most effective antibiotics against all the bacterial isolate while Cephradin, Cefuroxime, Cephalixin, Amoxycillin, Lincomycin, Nalidixic acid and Doxycycline were ineffective against the bacterial isolates.

Five homeopathic medicines namely *Thuja occidentalis*, *Berberis vulgaris*, *Chimaphilla umbellata*, *Eucalyptus globules* and *Oleum terebinthinae* were used to study the sensitivity profile of bacterial isolates in 1 ml/100ml, 2.5ml/100ml, 5ml/100ml, 7.5ml/100ml concentrations. All isolates showed resistance at 1ml/100ml and 2.5ml/100ml concentrations while *Staphylococcus epidermidis* and *Pseudomonas aeruginosa* showed sensitivity at 5ml/100ml concentration. All bacterial isolates were sensitive at 7.5ml/100ml concentrations except *Klebsiella* sp.