

June 07-08, 2018
London, UK

J Prev Infect Control 2018, Volume 4
DOI: 10.21767/2471-8084-C1-003

BACTERIOLOGICAL INVESTIGATION OF POSTOPERATIVE WOUND INFECTION AND STUDIES THEIR RESISTANT PROFILE

Ishaq Hossion

National Institute of Biotechnology (NIB), Bangladesh

Postoperative wound infection or surgical site infection is a severe problem in the surgical specialties, which can cause mortality, morbidity and economic burden. In this study postoperative wound swabs were collected from patients of Dinajpur Medical College. This study included 15 surgery patients with signs and symptoms indicative of wound infections and was evaluated for the study. Samples were taken from the patients during the period of surgical wound dressing before the wound was cleaned with antiseptic solution. The swab was inoculated onto plates of nutrient agar and 5% sheep blood agar by rolling the swab over the agar and streaked. These plates were incubated at 37°C for 24-48 hours in aerobic and anaerobic condition. Out of 15 postoperative wound infection samples, 10 (66.67%) samples

were culture positive. A high predominance of aerobic bacteria was observed but no agent was identified in anaerobic condition. The single etiologic agent was identified in 8 (80%) patients, mixed agents were found in 2 (20%) patients. The commonly isolated bacterial pathogens were *Staphylococcus aureus* (40%), *Pseudomonas aeruginosa* (20%), and *Escherichia coli* (20%). Antibiotic sensitivity test showed that the isolates were sensitive to two antibiotics such as ciprofloxacin and chloramphenicol while the most resistant drug was ceftriaxone, cephradine, cefixime, penicillin, clindamycin and sulphamethoxazole. The culture sensitivity tests showed that numerous and multi drug resistant bacteria are involved in postoperative wounds infection.

ishaqhossion@gmail.com