

# APPLIED MICROBIOLOGY, ANTIBIOTICS, ANTIMICROBIALS AND BENEFICIAL MICROBES

May 20-21, 2019 Tokyo, Japan

## Prescription pattern of surgical antibiotic prophylaxis in a Tertiary Care Hospital in Bangladesh

Qufshe Bardar Oais Fazlul Baqui

Army Medical College Bogura, Bangladesh

**Introduction & Objective:** Surgical antibiotic prophylaxis has become an integral part of standard surgical practice to prevent infections at the surgical site and thus enhance postoperative recovery. Like other cases, misuse and overuse of antibiotic is quite common in surgical prophylaxis, causing increase expenditure of treatment as well as antimicrobial resistance. There is no data on patterns of antibiotic use in surgical prophylaxis in Bangladesh. The main objective of this study is to find out the prescription pattern of prophylactic antibiotics in different surgeries in a Tertiary Care Hospital of private setting in Bangladesh.

**Method:** A prospective observational study was conducted among 600 patients undergoing different surgeries in a Tertiary Care Hospital of private setting in Dhaka, Bangladesh from November 2017 to April 2018. The demographic data, types of surgery, types of therapy, choice of antibiotic along with dosage formulation were collected.

**Results:** Out of 600, 306 patients (51%) were male and 294 (49%) were female. Highest bulk of patients were from Department of General Surgery (26%), followed by Department of Urology (24.5%) and Department of Obstetrics and Gynecology (22.5%). Majority of patients were age group 30-39 years (26%), followed by 50-59 years (23.5%) and 40-49 years (21.5%). Surgical prophylactic antibiotic was used in all 600 patients and all antibiotics were given in intravenous route (100%). 567 patients (94.5%) had received monotherapy of antimicrobial agent, whether 27 patients (4.5%) and 06 patients (1%) received two drugs combination and three drugs combination respectively. Third generation Cephalosporin, Ceftriaxone, was the most commonly prescribed antibiotic as monotherapy (65.1%), followed by second generation Cephalosporin, Cefuroxime (27.5%).

**Conclusion:** Ceftriaxone was the preferred antibiotic for surgical prophylaxis. Existence of an antimicrobial guideline along with antibiotic stewardship program in every hospital could be helpful for prescribers to play role in containment of antimicrobial resistance.

fazlul.baqui@gmail.com

### Notes: