**Original article:**

**The prevalance of anaerobes from cutaneous and subcutanueous wound infections**

**\* Kamble S 1, Pol S2, Jose T3, Gore V4,Kagal A5 Bharadwaj R6**

1\*Assistant Proffessor,Department of Microbiology,BJ Medical College Pune,Maharashtra,India.

2Asso. Proffessor, Department of Microbiology,BJ Medical College Pune,Maharashtra,India.

3Biotechnology student, VIT University, Vellore.

4Senior Technichian, Department of Microbiology,BJ Medical College Pune,Maharashtra,India.

5Prof. Department of Microbiology,BJ Medical College Pune,Maharashtra,India.

6Prof. and HOD, Department of Microbiology,BJ Medical College Pune,Maharashtra,India.

**\*Corresponding author:** Shital Kamble ;  **Email**:ingavaleshital@yahoo.in

**Abstract:**

**Introduction:** The role of anaerobic bacteria in human infections has been increasingly appreciated in recent years. Along with deep seated abscesses, anaerobes have reported to cause cutaneous and subcutaneous wound infections. Although, appropriate sample collection and choice of transport media still remains the key of successful recovery of anaerobes. So,the aim of the study was to know the prevalence of anaerobes with its antimicrobial susceptibility testing from cutaneous and subcutaneous wound infections and to compare the yield of anaerobes from four different transport media.

**Methodology:** A total of 50 samples were collected in four different transport media like Thioglycollate broth, Anaerobic transport medium (ATM), Robertsons Cooked Meat medium (RCM), Stuarts transport medium (STM), and were compared for their ability to recover the anaerobes from patients with cutaneous and subcutaneous wound infections over a period of 6 months (Jan 2012 to June 2012). The anaerobes were isolated, identified and antibiotic susceptibility testing was done as per CLSI guidelines.

**Result and conclusion:** From 50 samples,9 anaerobes were isolated(18%). Out of this, 88% anaerobes were obtained from swabs sent in Thioglycollate medium followed by ATM (77%), RCM (72%) and STM (60%). The predominant anaerobe isolated was clostridium spp followed by peptostreptococcus spp & propionibacterium spp. The isolates showed maximum sensitivity to clindamycin (55.5%) followed by penicillin, cefoxitin, metronidazole (44.4% each) and piperecillin (33.3%).Considering the increasing resistance in anaerobes, routine sensitivity testing of clinical isolates of anaerobes seems to be the need of hour.

**Keywords:**Anaerobes, Transport media, cutaneous and subcutaneous wound infections