

A Prospective Cross-Sectional Study On Bacteriology Of Smegma Among Male In Selangor

Mohamad Salleh Abdul Aziz¹, Faatihah Aziz Nordin², Fatin Balqis Sairan², Amirah Nuraisha Kamiran², Muhammad Izzat Syameer Mohd Zaid², Norfaizatul Shalida Omar².

¹Faculty of Medicine and Health Sciences, Islamic Science University of Islam Malaysia, Nilai, Negeri Sembilan, Malaysia

²Faculty of Medicine, University of Cyberjaya, Cyberjaya, 63000, Malaysia

Abstract

Introduction: Smegma is the end result of dead skin cells and fatty oils primarily shed from certain parts of our genitalia. Several studies have shown that there are bacteria isolated in the male's smegma, thus this study aims to discover the presence of bacteria in the smegma of male in Selangor, the types of bacteria in the smegma and to determine the sensitivity of antibiotic toward each type of bacteria.

Methods: A cross-sectional study was done where data was collected through consecutive sampling. Any male who undergone circumcision in MyMedik Circumcision Centre, meet all the inclusion criteria and does not adhere to the exclusion criteria will be selected as participant. A swab from smegma sample was taken and were subjected to bacterial analysis, gram staining and antibiotic sensitivity testing.

Results: Among 51 participants, 94.1% of them had mixed growth and 5.9% of them had no pathogen isolated. Within gram positive, *Enterococcus* sp. (25%) is the most common isolated organism while for gram negative, *Klebsiella* sp. (14.6%) is the most common isolated organism found. For antibiotic sensitivity, 100% of *Klebsiella* sp. and *Enterobacter* sp. are sensitive to Cotrimoxazole, Cefotaxime and Ceftazidime. 100% of *Escherichia coli* sensitive towards Ampicillin-Sulbactam. *Enterococcus* sp. is 100% sensitive towards Ampicillin, Teicoplanin and Linezolid while 100% of *Staphylococcus aureus* are sensitive to Vancomycin.

Conclusion: Majority of male in Selangor were found to have pathogens in their smegma and it is largely contributed by gram negative bacteria. Based on the result, Ampicillin Sulbactam, Ceftazidime or Cefotaxime may be given as a prophylaxis prior to the circumcision.

Keyword: Smegma, bacteriology, antibiotics, sensitivity

INTRODUCTION

Smegma is defined as the end result of dead skin cells and fatty oils primarily shed from certain parts of our genitalia; the inner cavity of the foreskin in men and the folds of the labia minora and clitoris in women. But it's waxy, sometimes smelly. As we know, we excrete oil and water from our skin all the livelong day, and for good reason. The oily byproducts, known as sebum, coat our skin against microbial invaders and keep the skin waterproof. Likewise, smegma serves its