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HIV and cervical cancer in Jamaica

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The *Human Papilloma Virus* (HPV) and *Human Immunodeficiency Virus* (HIV) are both sexually transmitted infections, which have impacted the prevalence of cervical dysplasia and cancer in women. Infections with one of these viruses can facilitate infection with the other. In Jamaica cervical cancer is seen in 27.5 per 100, 000 women making it the second leading cause of cancer death in this population only to breast cancer as a cause of death in women with cancer. Our study investigates the sero prevalence of anti-HIV antibodies in women with abnormal pap smears in Jamaica to determine the influence of HIV on cervical dysplasia. Only patients with positive confirmatory tests were classified as HIV positive. Enzyme-Linked Immunosorbent Assay (ELISA) was used for screening while the Western blot was used for confirmation. Sero-prevalence of anti-HIV antibodies in women with abnormal pap smears was 0.85%. The preliminary results of HIV sero prevalence in women with abnormal pap smears may be low in Jamaica because of the success of the HIV/AIDS programme. A larger study can be done in the future and be representative of the Jamaica population, since the present study has as a limitation a smaller number of controls in comparison to cases. The findings reported do not support the hypothesis that HPV infection facilitates HIV infection in the studied population. It is the first study of its class reported in the Caribbean. It has been postulated that HPV infections may account for the cervical dysplasia despite the low prevalence of HIV association in the women with abnormal pap smears and that persistent HPV and to a lesser extent the HIV is responsible for the prevalence of abnormal pap smears in Jamaica. A limitation of the study was that the control group was smaller than that expected for 3 million's population but a larger study can be done in the future.

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Bacteriological profile and drug susceptibility patterns in dacryocystitis patients attending Gondar University Teaching Hospital, Northwest Ethiopia

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Background: Bacterial pathogens isolated from dacryocystitis patients are diverse and complex in terms of their distribution, prevalence, and antimicrobial susceptibility pattern. The clinical importance of microbial causes of dacryocystitis and pattern of drug resistance has not been reported in northwest Ethiopia. Moreover, the management of dacryocystitis is based on only clinical observation. Therefore, this study attempted to identify and define clinical and microbiological characteristics of microbial agents of dacryocystitis and its antibiotic susceptibility patterns.

Methods: A cross sectional study was conducted from January 2011-January 2012 among dacryocystitis patients attending ophthalmology outpatient department of Gondar University Teaching Hospital. Socio demographic and clinical data collection, microbiological analysis and antibiotic susceptibility test patterns were done following standard procedures.

Results: From the total of 51 dacryocystitis cases, bacterial origins were isolated among 31 (60.8%) cases. The dominant isolates were Coagulase Negative Staphylococci (CNS) 9(29.0%), *Staphylococcus aureus* 6(19.4%) and *Pseudomonas* species 3(9.7%). *S. pneumoniae*, *Enterobacter* species, *K. pneumoniae* and *H. influenzae* were each accounted 6.5% isolation rate. Among the commonly prescribed antimicrobials tested for susceptibility pattern; amoxicillin 38.7%, ciprofloxacin 25.8%, chloramphenicol 25.8%, co-trimoxazole 25.8%, and ampicillin 19.4% were resistant to the overall bacterial isolates identified. Only *Citrobacter* species were sensitive to all antibiotics tested but the rest bacterial isolates were resistant for at least to one, two, three, four and more antibiotics tested. Overall, 9(29.0%) of the bacterial isolates were resistant to only one antibiotic and resistance to two, three and four antibiotics each accounted 5(16.1%) rate.

Conclusions: Though the information derived from this study was very meaningful, further studies encompassing viral, fungal, parasitic and anaerobic bacteria origin are important to better define the spectrum and relative incidence of pathogens causing dacryocystitis. Microbiological analysis and anti-microbial susceptibility pattern is mandatory for the selection of a specific anti-microbial therapy and to the control of further resistance development of bacterial strains.

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