

Urinary tract infection among obstetric fistula patients at Gondar University Referral Hospital, Northwest Ethiopia

Yitayih Wondimeneh, Dagnachew Muluye, Abebe Alemu, Asmamaw Atinafu, Gashaw Yitayew,**Teklay Gebrecherkos**, Agersew Alemu, Demekech Damtie and Getachew Ferede

Department of Medical Microbiology, School of Biomedical and Laboratory sciences, College of Medicine and Health Sciences (CMHS), University of Gondar (UOG), P.O. box 196.

Abstract

Background: Many women die from complications related to pregnancy and childbirth. In developing countries particularly in sub-Saharan Africa and Asia, where access to emergency obstetrical care is often limited, obstetric fistula usually occurs as a result of prolonged obstructed labour. Obstetric fistula patients have many social and health related problems like urinary tract infections (UTIs). Despite this reality there was limited data on prevalence UTIs on those patients in Ethiopia. Therefore, the aim of this study was to determine the prevalence, drug susceptibility pattern and associated risk factors of UTI among obstetric fistula patients at Gondar University Hospital, Northwest Ethiopia.

Methods: A cross sectional study was conducted from January to May, 2013 at Gondar University Hospital. From each post repair obstetric fistula patients, socio-demographic and UTIs associated risk factors were collected by using a structured questionnaire. After the removal of their catheters, the mid-stream urine was collected and cultured on CLED. After overnight incubation, significant bacteriuria was sub-cultured on Blood Agar Plate (BAP) and MacConkey (MAC). The bacterial species were identified by series of biochemical tests. Antibiotic susceptibility test was done by disc diffusion method. Data was entered and analyzed by using SPSS version 20.

Results: A total of 53 post repair obstetric fistula patients were included for the determination of bacterial isolate and 28 (52.8%) of them had significant bacteriuria. Majority of the bacterial isolates, 26 (92.9%), were gram negative bacteria and the predominant ones were *Citrobacter* 13 (24.5%) and *Escherichia coli* 6 (11.3%). *Enterobacter*, *Escherichia coli* and *Proteus mirabilis* were 100% resistant to tetracycline. *Enterobacter, Proteus mirabilis, Klebsella pneumonia, Klebsella ozenae* and *Staphylococcus aureus* were also 100% resistant to ceftriaxone.

Conclusion: The prevalence of bacterial isolates in obstetric fistula patients was high and majority of the isolates were gram negative bacteria. Even thought the predominant bacterial isolates were *Citrobacter* and *E. coli*, all of the bacterial isolates had multiple antibiotic resistance patterns which alert health profession to look better treatment for these patients.

Keywords: *UTI, Obstetric Fistula, Gondar University hospital*

Biography

I have at the age of 27 years a B.Sc. degree in medical laboratory sciences and M.Sc. degree in Medical Microbiology from Haramaya University and University of Gondar, Ethiopia respectively. I have been working as instructor and researcher in the University of Gondar, Ethiopia since 2009. I have published 6 papers in peer reviewed journals and currently I win three mega projects with my colleagues, and the project titles are bacterial drug resistance in inanimate objects from the Hospital environment, North west Ethiopia, water analysis and coliforms in rural and urban areas of Ethiopia and Molecular Epidemiology,Molecular distribution,Bacterial drug resistance and associated risk factors of *N.gonorhoea* and *C.trachomatis* among pregnant mothers attending in Amhara regional state Referral Hospitals, Northwest Ethiopia

Presenting author details

Name: Teklay Gebrecherkos Teklu

Nationality: Ethiopian

Address: University of Gondar, Ethiopia

Email: tgchirkos@yahoo.com

Cell phone: +251-922-795314

Session name/ number: NA
Category: Oral presentation