

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

Teklay Gebrecherkos, Yitayih Wondimeneh, Dagnachew Muluye, Abebe Alemu, Asmamaw Atinafu, Gashaw Yitayew, Agersew Alemu, Demekech Damtie and Getachew Ferede
College of Medicine and Health Sciences - University of Gondar, Ethiopia

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 because 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 though, 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 for better treatment for these patients.

Biography

Teklay Gebrecherkos completed his BSc degree in Medical Laboratory Sciences and MSc degree in Medical Microbiology from Haramaya University and University of Gondar, Ethiopia respectively. He has been working as Instructor and Researcher in the University of Gondar, Ethiopia since 2009. He has published six papers in peer reviewed journals and currently he has won three mega projects with his colleagues, and the project titles are 1. Bacterial drug resistance in inanimate objects from the Hospital environment, Northwest Ethiopia; 2. Water analysis and coliforms in rural and urban areas of Ethiopia; 3. Molecular epidemiology, molecular distribution, bacterial drug resistance and associated risk factors of N. gonorrhoea and C. trachomatis among pregnant mothers attending in Amhara regional state Referral Hospitals, Northwest Ethiopia.

tgchirkos@yahoo.com

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