ABSTRACT TITLE

A comparison of antibiotic-saline irrigation versus saline only irrigation in the prevention of early surgical site infection in clean Orthopaedics wounds.

AUTHORS

Tosin Olusoga Akinyemi *FMCOrtho, MRCS(Ed), FRCS (Tr & Orth)* Anirejuoritse Bafor *FMCS, FMCOrtho, FACS*, Alfred Ogbemudia *FWACS*

[1]Department of Trauma and Orthopaedics North Tees and Hartlepool NHS Foundation Trust, Stockton-on- Tees, England. akinyemiolusoga@yahoo.com
[2]Department of Orthopaedic Surgery, Nationwide children's Hospital, Columbus, Ohio.
[3]Department of Trauma and Orthopaedics, University of Benin Teaching Hospital, Benin City, Nigeria.

ABSTRACT

An *Introduction:* Surgical site infection (SSI) is one of the most frightening complications of Orthopaedic surgeries. We looked at the role of antibiotic-saline solution irrigation in reducing the risk of SSI following clean Orthopaedics wounds.
Methods: Following institutional review board approval, we prospectively recruited eligible patients presenting with closed fractures of any of the limbs' long bones, who consented to management by open reduction and internal fixation. We randomized patients into two groups. Group A patients had their operative wounds irrigated with saline only, while group B had irrigation with saline containing antibiotics (ciprofloxacin). Postoperatively, we assessed the wounds using the ASEPSIS score on days 5, 14, and 30.
Results: Forty-nine (49) limbs in forty-eight (48) patients were evaluated. The male to female ratio was 2:1, with 32 males and 16 females (66.7% and 33.3%, respectively). There was no significant difference in the SSI rate of wounds irrigated with saline and those irrigated with antibiotics at the 5th ($p = 0.074$) or the 14th ($p = 0.312$) post-operative day.
Conclusion: The incidence of SSI was not significantly influenced by the addition of antibiotics to the irrigation fluid.

SHORT BIOGRAPHY

Dr Tosin Olusoga Akinyemi studied Medicine at the Ladoke Akintola University of Technology Ogbomoso and had his MBBS degree in 2009. He had his postgraduate Orthopaedic training at the University of Benin Teaching Hospital, Benin City where he had the fellowship in Trauma and Orthopaedic at the Naational Postgraduate Medical College of Nigeria. He completed the Medical Training Initiative program of the Royal College of Surgeons Edinburgh and a Masters in Orthopaedics at the Teesside University in 2021. He has worked as an Orthopaedic registrar in the North East of England and has completed the membership and fellowship examination of the Royal College of Surgeons(Tr & Orth). He has published a few research articles and participated in several collaborative studies.

DETAILS OF THE PRESENTER FOR CERTIFICATION:

Name: Tosin Olusoga Akinyemi
Affiliation:North Tees and Hartlepool Foundation
Country: England
Presentation Category: (Poster Presentation)
Session Name: Trauma

Email: akinyemiolusoga@yahoo.com