



Sudanese Orthopedic Surgeons Perception about Removal of Orthopedic Implants after Fracture Healing, Khartoum State

Rami Ahmed Mohammadain, MD ^{*1}, Elhadi Abdelrahim ²

1. Orthopaedic Surgeon Specialist, Elobied teaching hospital, Sudan.
2. Orthopaedic and Hand Surgery Consultant.

Corresponding Author: Rami Ahmed Mohammadain, MD, Orthopaedic Surgeon Specialist, Elobied teaching hospital, Sudan.

Copy Right: © 2023 Rami Ahmed Mohammadain, MD, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Received Date: January 05, 2023

Published Date: January 15, 2023

Abstract

- *The routine removal of orthopedic fixation metal implants after fracture healing remain an issue of debate.*
- *There are no evidence based guide lines on this matter and the question whether to remove or to retain them is part of discussion worldwide*
- *Little is known on orthopedic surgeon practice and perceived effectiveness of orthopedic implants removal in different clinical sittings.*

Objectives

General Objectives

To evaluate the perception of Sudanese orthopedic surgeons in Khartoum state about routine removal of orthopedic metal implants after fracture healing

Specific Objectives

To identify indications of routine orthopedic implant removal after fracture healing.

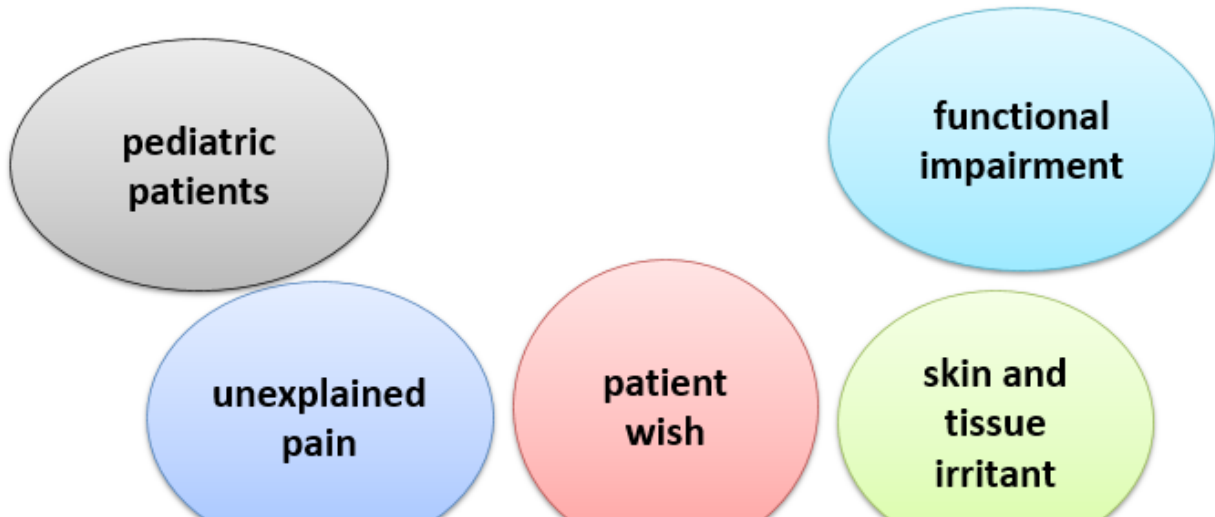
To determine the priority of implants removal

Methodology

- Mixed convergent parallel study
- **Quantitative data:** Questionnaire contained 32 items distributed to 50 orthopedic surgeons working in governmental hospitals in Khartoum state.
- Mixed convergent parallel study
- **Qualitative data:** Seven open ended questions collected from 10 senior orthopedic surgeons by in depth interview.

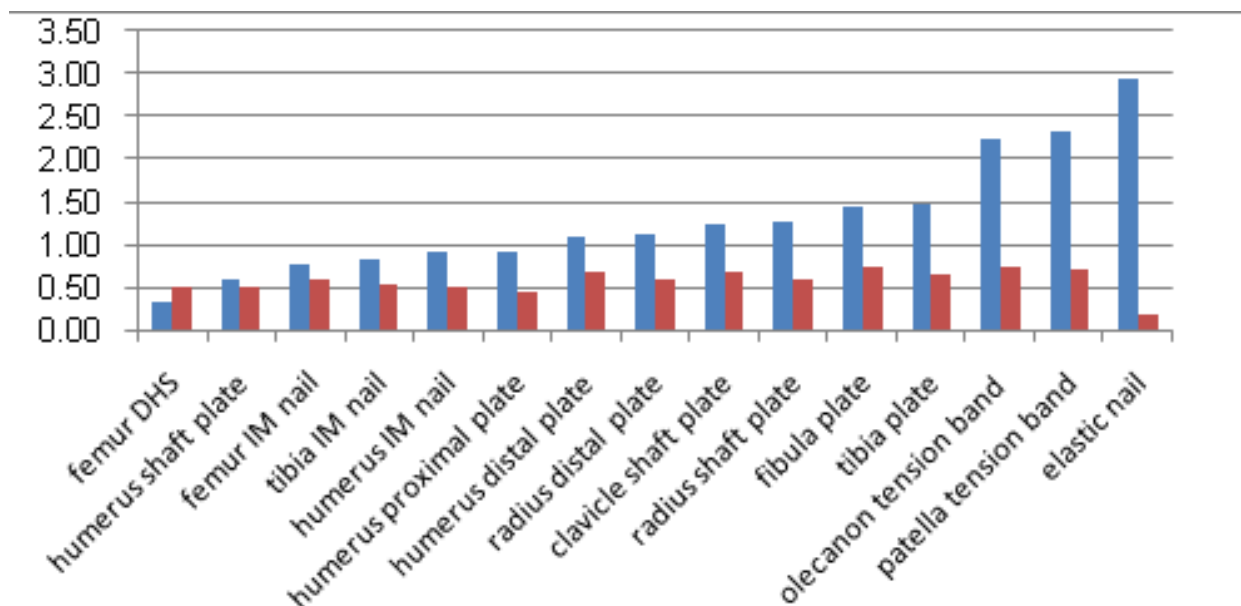
Result

- Majority of orthopedic surgeons (98%) did not agree that asymptomatic orthopedic implants should routinely removed after fracture healing in adult age group
- 98% agreed that implants should always be removed from children patients.
- The major indications for routine implants removal were:



Most surgeons accrued highest priority to removal of implants in:

- Elastic nail with a mean rating of 2.96 ± 1.98 ,
- patella tension band 2.34 ± 0.717 ,
- olecranon tension band 2.24 ± 0.774 ,
- tibia plate 1.48 ± 0.677 ,
- fibula plate 1.46 ± 0.762



Conclusion

Most of Sudanese orthopedic surgeons working in governmental hospitals of Khartoum state refuse a routine removal policy of metal implants as this may have a risk for soft tissues and other surgical complications.

Pediatric patients, unexplained pain, skin and tissue irritant and functional impairment are the main indications for routine implant removal surgeries.