THE UTILITY OF ROUTINE POSTOPERATIVE X-RAYS FOLLOWING UNCOMPLICATED HARDWARE REMOVAL

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Disclosures

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My disclosure is in the Final AOFAS Mobile App.
I have no potential conflicts with this presentation.
INTRODUCTION

• Removal of hardware is very common, especially in the foot and ankle
• Routine x-rays are frequently obtained following hardware removal
• Utility of routine x-rays is questionable
  • Potential undue burden on patients
  • Potential low cost effectiveness
HYPOTHESIS

• Routine follow-up X-rays do not change the ultimate treatment plan after uncomplicated removal of hardware for the sole indication of hardware-related pain.
METHODS

• Retrospective review conducted at a Level 1 trauma center from 2008-2013
• Patients identified using CPT code 20680 (Removal of implant, deep)
• Patients excluded if hardware removed for other reasons
  • infection, wound dehiscence, failure of initial treatment, need for removal to facilitate additional procedures
• Within the inclusion criteria, patients were selected who received a post-operative X-ray within 60 days

• Subsequent notes in the medical record were used to determine whether this imaging changed the plan of treatment for any of these patients
RESULTS

- 263 patients were investigated for potential inclusion using the cpt code, as mentioned in methods.
- 146 patients were excluded because they had hardware removal for reasons other than pain. Most common reasons were infection, non-union and concurrent procedures (fusion, debridement).
- 14 patients that were excluded did not have a follow-up XR within 60 days.
RESULTS

- 103 patients included
- In 103/103 patients (100%), the post-operative X-rays did not alter the pre-existing treatment plan
CONCLUSIONS

• When hardware is removed for hardware related pain, and no other complaints are present post-operatively, routine post-operative X-rays are unnecessary
  • X-rays do not change treatment plan
  • X-rays are not cost effective, subject the patient to unnecessary radiation, and extend office visit times
REFERENCES


