CASE REPORT

One-Year Follow-Up on Acute Septic Knee Arthritis Treated with XPERIENCE® No-Rinse Solution – A Case Report

Daniel Hawk*, Dr. Jon Minter*

*Sr. Research Program Manager, Email: dhawk@nextscience.com
*Jon Minter, Orthopaedic Surgeon, Department of Orthopedic Surgery, Northside Hospital Orthopedic Institute/NHOI, Alpharetta, Georgia, Email: minterje@gmail.com

Abstract
Acute septic knee arthritis is a rare but potentially devastating complication following knee arthroplasty. We present a case of an 81-year-old male who developed Acute septic knee arthritis following a revision Total Knee Arthroplasty (TKA). The patient’s clinical course was complicated by Klebsiella Pneumonia infection, likely originating from an infected pacemaker. This case report highlights the successful management of Acute septic knee arthritis using XPERIENCE® No-Rinse Solution as a crucial component of the treatment. The patient experienced complete resolution of knee symptoms without recurrence.

Keywords:
- Acute septic knee arthritis
- Total knee arthroplasty
- Klebsiella Pneumonia
- Infected pacemaker
- Arthroscopic lavage
- XPERIENCE® No-Rinse Solution

Introduction
Acute septic knee arthritis is a rare but severe complication of knee arthroplasty. Timely diagnosis and appropriate management are essential to prevent joint destruction and systemic complications. This case report presents the clinical course and successful management of an 81-year-old male who developed acute septic knee arthritis following a revision TKA, with a focus on the utilization of XPERIENCE® No-Rinse Solution in the treatment.

Case Presentation

Patient Description:
- An 81-year-old male presented to the emergency room 11 days post-operatively.
He had undergone a revision Total Knee Arthroplasty (TKA) due to an unstable knee, which required a poly exchange.

On admission, the patient complained of knee pain, mental confusion, atrial fibrillation, elevated liver enzymes, inability to stand, and urinary retention.

Clinical Course & Conclusion

- Aspiration of the knee joint was performed acutely, revealing the presence of bacteria and an increased white blood cell count.
- The bacteria were identified as Klebsiella Pneumonia.
- Due to the patient's deteriorating health, he was admitted to the ICU, intubated, and placed on pressors.
- Further investigation revealed the likely source of infection to be an infected pacemaker.
- Given the patient's severely compromised health, a decision was made to perform arthroscopic lavage as a temporizing measure.
- Arthroscopic lavage was performed with the installation of initially 1 liter of normal saline, followed by 2 liters of XPERIENCE® No-Rinse Solution via ingress and egress cannulae. A post-op drain was left in place for approximately 72 hours.
- The patient was continued on intravenous Merrem and Vancomycin antibiotics for 6 weeks under the guidance of infectious disease consultants.
- Complete resolution of knee symptoms occurred without recurrence.
- The infected pacemaker was exchanged during the hospitalization.
- Following treatment, the patient was admitted to rehabilitation with no sequelae.
- At one year follow up the patient is free from infection and can perform ADLs.

Discussion

Acute septic knee arthritis is a challenging condition, particularly in elderly patients with multiple comorbidities. In this case, Klebsiella Pneumonia infection, likely originating from an infected pacemaker, led to a severe joint infection necessitating arthroscopic lavage. The choice of lavage solution, XPERIENCE® No-Rinse Solution, played a crucial role in the patient's successful treatment.

XPERIENCE® No-Rinse Solution is a specialized irrigation solution that has been developed to enhance the effectiveness of lavage procedures in joint infections. In this case, it was used in combination with standard lavage techniques to thoroughly cleanse the infected knee joint. The patient experienced complete resolution of knee symptoms, highlighting the potential benefits of using XPERIENCE® No-Rinse Solution in such cases.

Conclusion

This case report demonstrates the successful management of acute septic knee arthritis using XPERIENCE® No-Rinse Solution as a key component of the treatment. The timely identification of the causative pathogen, source of infection, and the application of appropriate surgical and medical interventions, including XPERIENCE® No-Rinse Solution, led to a favorable outcome. This case underscores the importance of multidisciplinary collaboration and innovative solutions in complex orthopedic infections.

Acknowledgments

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Ethical Consideration

None

Conflicts of Interest

None

Bibliography

None
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