Abstract

The incidence of osteomyelitis has been reported at 1.8% of all puncture wounds. Wide variation exists in the literature regarding the percentage of these cases being caused by Pseudomonas, with reports ranging from 10.6% to 93%. We present an unusual case of septic arthritis seventeen years after the initial puncture wound; the joint was presumed to be gout until aspiration of the 1st metatarsophalangeal joint demonstrated Pseudomonas aeruginosa. After a review of the literature, to our knowledge, it is the longest case of Latent Pseudomonal osteomyelitis of the foot following a puncture wound.

Introduction

A 32yo male with an unremitting past medical history presented to the emergency room with the complaint of increased swelling, pain, and redness to the 1st metatarsophalangeal joint (MTPJ) of the right foot. Radiographs of the right foot were negative for acute pathology and his uric acid was 5.3 mg/dl. He was treated for presumed gout, which included a course of oral non-steroidal anti-inflammatories, and referred for follow up with Rheumatology. Two days later, the patient presented to the Rheumatologist for further evaluation. Upon further questioning, the patient admitted that 17 years ago he stepped on a nail, which had punctured his right foot in the area of the 1st MTPJ, at summer camp in West Virginia. Shortly thereafter, he went whiteboard skating and noticed increased redness, swelling, and pain to the right 1st MTPJ. He presented to Podiatry two days after admission as the patient did not improve on IV Zosyn and the oral Cipro. Podiatry was consulted two days after admission as the patient did not improve of IV Zosyn and the oral Cipro. After thorough review of the radiographs, MRI, and the patient’s recalcitrant pain and erythema in spite of IV antibiotics and possible surgical intervention.

History

The incidence of osteomyelitis has been reported at 1.8% of all puncture wounds. Wide variation exists in the literature regarding the percentage of these cases being caused by Pseudomonas, with reports ranging from 10.6% to 93%. We present an unusual case of septic arthritis seventeen years after the initial puncture wound, which was presumed to be gout until aspiration of the 1st metatarsophalangeal joint demonstrated Pseudomonas aeruginosa. After a review of the literature, to our knowledge, it is the longest case of Latent Pseudomonal osteomyelitis of the foot following a puncture wound.

Discussion

The incidence of osteomyelitis has been reported at 1.8% of all puncture wounds. Wide variation exists in the literature regarding the percentage of these cases being caused by Pseudomonas, with reports ranging from 10.6% to 93%. We present an unusual case of septic arthritis seventeen years after the initial puncture wound, which was presumed to be gout until aspiration of the 1st metatarsophalangeal joint demonstrated Pseudomonas aeruginosa. After a review of the literature, to our knowledge, it is the longest case of Latent Pseudomonal osteomyelitis of the foot following a puncture wound.

Conclusion

The incident nature of the osteomyelitis infection often leads to difficulty in diagnosis and most commonly a delay in accurate diagnosis, with both delay and delay in treatment being less than that of osteomyelitis induced by gram positive organisms. This case is unique due to the extremely long latency of 17 years following the initial puncture wound to the area. To our knowledge, it is the longest case of Latent Pseudomonal osteomyelitis in the foot and able to be 9 or more years.

References