

A CASE REPORT OF OSTEOMYELITIS IN THE GREAT TOE A CONSERVATIVE TREATMENT APPROACH.

Orthopaedics

Dr. Arivoli. S	M.S Orthopaedics First Year Resident, Department Of Orthopedics, Sree Balaji Medical College And Hospital, Chromepet, Chennai-600044, Tamil Nadu.
Dr. Ambrish V. S*	M.S Orthopaedics Senior Resident, Department Of Orthopedics, Sree Balaji Medical College And Hospital, Chromepet, Chennai-600044, Tamil Nadu. *Corresponding Author
Dr. Lionel John	M.S Orthopaedics Unit Chief, Department Of Orthopedics, Sree Balaji Medical College And Hospital, Chromepet, Chennai-600044, Tamil Nadu.

ABSTRACT

Ulcers of the distal toe are common in patients with toe deformities and many times are complicated by osteomyelitis of the phalanx. Amputation of the toe is the standard treatment in many institutions; however, this can lead to abnormal biomechanics of the foot predisposing the patient to recurrent ulceration and further amputations, especially in patients with diabetes and those with neuropathy. It has been found that conservative, local operative procedures to remove the infected bone can avoid these complications and even avoid long-term antibiotic therapy. Many of these procedures can be performed in the wound clinic. To show its utility, a case report of this procedure and a small series of these patients treated in the wound clinic are presented.

KEYWORDS

osteomyelitis, diabetic foot.,

INTRODUCTION:

Ulcers of the distal toe with osteomyelitis are common in patients with diabetes and peripheral neuropathy as well as those with toe deformities such as hammertoes. The deformed toes and/or neuropathic toes are not protected from pressure when walking, this pressure easily results in ulceration. Because of the small amount of subcutaneous tissue between the skin and the end of the phalanx, bacteria can quickly spread to the tip of the phalanx with resulting osteomyelitis(1). Unfortunately, many physicians and surgeons consider the only treatment of this problem to be amputation of the toe, many times including the metatarsal head of the tarsometatarsal joint. However, even the amputation of one toe can result in biomechanical changes of the foot, predisposing these patients to future recurrent ulcers and ambulation problems. Some may consider administering long-term intravenous antibiotics if amputation is not performed, but the use of long-term antibiotics has not been shown to increase healing rates and has been shown to prolong ulcer healing times compared with conservative operative procedures removing the infected bone in the toe combined with oral antibiotics(2-5). The following is a case report discussing how we approached to treat a infected great toe.

Case Report:

A 37-year-old male patient presented to our outpatient clinic with complaints of ongoing pain of 3 months duration in the great toe of his right foot and followed by discharging pus from the toe. He had an alleged history of stamped over a rusty metal piece with the bare foot followed by which he developed pain and swelling over the great toe. Patient is known diabetic patient on irregular medications. He developed discharging sinus from the great toe for which incision drainage was done at the local clinic. After the procedure patient was not on regular medications and denied to do dressing at hospital. Again he developed pus discharge with non-healing ulcer over the toe.

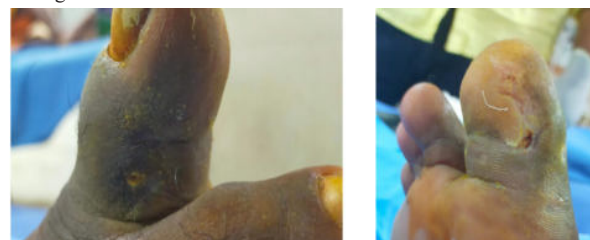


amputation. For second opinion he came to our hospital on physical examination, it was noticed that his right great toe was enlarged when compared with the left side (Figure 1). His toe had 2 discharging sinus with 1 had active foul smelling discharging pus in it and local warmth & tenderness was present on palpation. We did all routine blood investigations initially followed by MRI of the right foot, which showed osteomyelitis of the distal phalanx. We planned to treat him conservatively with appropriate antibiotics(levonadifloxacin) for a period of 14 day intravenous injection followed by oral antibiotics. At regular interval dressing was also done and improved day by day of the wound.



DISCUSSION:

Ulcers of the distal toe with osteomyelitis are common in patients with diabetes and peripheral neuropathy, as well as in patients with toe deformities such as hammertoes. This case presentation and the work of others confirm that conservative medication with IV and oral antibiotics alone are very successful in the treatment of these conditions. In this case report, we have administered IV antibiotics followed by oral antibiotics for 1 month. Emrok 800mg Injection belongs to the quinolone antibiotics category, containing the active ingredient Levonadifloxacin(6-9). It is used to treat various bacterial infections, including skin and soft tissue infections. It may also be helpful in treating diabetic foot infections (high blood sugar damages the nerve), bacteremia conditions (presence of bacteria in the bloodstream), and hospital and community-acquired pneumonia(10-13). This drug is contraindicated in individuals with known hypersensitivity or allergy to it or its component. No major amputations were required in the patient(14). These results show that 98% of the case was healed with the intravenous and oral antibiotics. The work of others has confirmed the efficacy and safety of treating these patients with conservative operative procedures in the outpatient setting.



He went to a near by hospital where they have advised him for great toe

CONCLUSION:

Early diagnosis of soft tissue is great importance in the prevention of infection. However, it does not always present in a typical localization with characteristic clinical findings. This may cause difficulty in diagnosing this neoplasm. Osteomyelitis must be kept in mind in the differential diagnosis of 4 Case Reports in Orthopedics patients presenting with painful hypertrophy of the great toe. Furthermore, pathological sampling should never be ignored, even in patients for whom infection is considered the most likely diagnosis.

Clinical message:**Source Of Finance-** NIL

Consent- Consent of the patient has been taken so that his photo and details can be published in the case report.

Competing Interests- Authors declare that there is no competing interest.

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