Chronic Intractable Nontuberculous Mycobacterial (NTM) - infected Wound After Acupuncture **Therapy in the Elbow Joint:** A Case Report

DOI: 10.12998/wjcc.v12.i36.6926 * Hoon Kim, MD, PhD, Jong Hyup Kim, MD, Seok Beom Lim, MD, In Chang Koh, MD, PhD, Soo Yeon Lim, MD

Department of Plastic and Reconstructive Surgery, Konyang University Hospital, Konyang University College of Medicine, Myunggok Medical Research Center, Daejeon, Korea

Purpose: Nontuberculous mycobacterial (NTM) infectious wounds in the joint have been known as hard to be treated and few cases have been reported, especially when it comes to iatrogenic post-acupuncture therapy. Herein, we present a rare case of chronic intractable NTM-infected wound at the elbow joint, which was completely healed with non-surgical conservative dressing and intravenous antibiotic treatment.

Methods: An 81-year-old female patient suffered from the chronic wound around the elbow joint after acupuncture therapy due to chronic pain. The patient had a past history of pulmonary tuberculosis. MRI scans revealed synovial thickening with effusion and subcutaneous cystic lesions. Open synovectomy and serial debridement were performed by orthopedic surgeon (OS). However, the wound got worse to be chronic. NTM (M. abscessus) was identified in wound culture. Conservative wound care including hydrogel with povidone iodine (RepiGelTM, Mundipharma), dialkyl carbamoyl chloride-coated dressing (DACC, Sorbact® Ribbon), injectable acellular dermal matrix (CG Paste, CG Bio, Korea), and intermittent Negative Pressure Wound Therapy (PICO, Smith+Nephew) were applied. Intravenous antibiotics over NTM infection were accompanied.

Results: Chronic intractable NTM infectious wound was completely healed without limitation of movement (LOM) of the elbow joint in 13 months.

Conclusions: Whenever the chronic non-healing ulcerative lesions are encountered in patient with history of untreated tuberculosis, clinical awareness to rule out NTM infection appears to be necessary. Conservative wound care with appropriate intravenous antimicrobial agent can lead to complete healing without LOM.





- ulcerative skin defect.
- abscessus.

Figure 2. T2-weighted MRI images of right elbow joint. Synovial thickening with effusion in right elbow joint, subcutaneous cystic lesions with adjacent subcutaneous edema at lateral aspect of elbow joint and posterior aspect of proximal forearm were found.

Figure 3. Depiction of injectable paste-type acellular dermal matrix (CG Paste, CG Bio, Korea) applied in the right elbow joint cavity. Subsequently, the wound showed gradual reduction in both the dimensions of the raw surface and the amount of exudate.



Figure 1. Clinical images of left elbow joint wound.

A) The initial wound status at the time of consultation from Orthopedic Surgery revealed an open joint space with an

B) 120 days after infectious wound dressing and IV antibiotic treatment. Dimension of the wound was

reduced, and wound culture revealed no evidence of M.

Figure 4. Complete wound healing was obtained with intact range of motion of elbow joint. No recurrence after 2 years.

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