

## A case of chronic osteomyelitis mimicking odontogenic pain

Yoon Lee<sup>1\*</sup>, Kwang-Ho Park<sup>2</sup>, Jeong-Won Park<sup>1</sup>, Su-Jung Shin<sup>1</sup>

<sup>1</sup> Department of Conservative Dentistry, Yonsei University, Seoul, Korea

<sup>2</sup> Department of Oral & Maxillofacial Surgery, Yonsei University, Seoul, Korea

### I. Introduction

Proper management of the patient in pain is very important in case of endodontic emergency. To achieve that purpose accurate diagnosis is essential for successful treatment outcome. However, the clinician must remember that the pain can be originating from odontogenic and/or nonodontogenic origin. To avoid misdiagnosis and improper treatment, thorough clinical and radiographic examination and evaluation of the dental history are important. This case reports chronic osteomyelitis mimicking odontogenic pain.

### II. Case Presentation

1. Sex/age: M/69
2. Chief Complaint (C.C): Persistent pain on the right mandibular region, not relieved by medication
3. History of C.C: Pain on mandibular molar region → Pulpotomy on #48 (Local clinic) → Pain persisted  
Extraction of #48 (OMFS department) → Pus discharge on #47 area, pain persisted  
Curettage on #47 (periodontics department) → Cervical caries found, pain persisted
4. Present Illness

	#47	#46	#45	#44
Per	++	++	+	+
Cold	-	-	+	-
EPT	-	-	+	N/A

5. Impression: R/O non-odontogenic pain
6. Tx Plan: Refer to OMFS to rule out osteogenic pathosis
7. Final Diagnosis: Chronic Osteomyelitis was confirmed with biopsies.

### III. Conclusion

It may be tempting to initiate endodontic treatment even when it is not clear if the pain is of endodontic origin. However, such treatment may not resolve the problem. In this case, although the patient presented with signs and symptoms of endodontic origin, the pain could not be controlled by routine root canal treatment since the cause of pain was not removed. For the exact diagnosis, an exploratory surgery was done and osteomyelitis was found.

Clinically, if a clear diagnosis cannot be made, it is important to perform additional test or wait until a definite diagnosis can be reached before jumping into treatment. In addition, even if the patient claims that he has a "toothache," the clinician should always consider that the pain may not be of an odontogenic origin.