


# Improvement of a Patient's Pelvic Region after Extracting an Erupting Maxillary Wisdom Tooth

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## Abstract

This study aims to show that the buccal mucosa can be negatively affected by a rough tooth surface or protrusion, potentially influencing the condition of a patient's pelvic region. Herein, this work presents a case of a 20-year-old female suffering from lumbago due to unknown causes. The patient was treated by a simple dental procedure, wherein a wisdom tooth was extracted, thereby inhibiting the negative stimulation of the buccal mucosa. After the extraction, her range of motion and pelvic joint restriction improved, and her lumbago symptoms subsided. There was no recurrence of symptoms for at least one year after the procedure. Although the reason for the effectiveness of this treatment remains unclear, dentists should pay attention to the effects of tooth formation on the entire body. Dental conditions may have an effect on diseases that affect other parts of the body. Thus, dental treatments may be considered as an option for managing other systemic disorders.

## Keywords

Oral Mucous Membrane, Wisdom Tooth, Tooth Formation, Lumbago

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## 1. Introduction

Dentistry and overall health are interdependent. In clinical cases, symptoms, including lower back pain, stiff shoulders, and hip joint dysregulation, can be linked to dental issues [1]-[4]. Previously, a case wherein the pointed buccal side of a tooth irritated the buccal mucosa was reported, which resulted in the onset of lower back pain [2]. Herein, this work presents a case wherein the occlusal surface of an incompletely erupted maxillary wisdom tooth irritated the buccal mucosa, causing abnormalities in the pelvic joints and lower back pain. These symptoms

were alleviated by extracting the tooth. Although the mechanism behind the treatment's effectiveness remains unknown, healthcare workers, especially dentists, should consider the effects of dental situations on systemic conditions.

## 2. Case Report

### 2.1. Subject and Method

The subject was a 20-year-old female who suffered from lower back pain when she stood for long periods. Her symptoms have been present for several months. She had no notable medical history.

### 2.2. Research Method

A right maxillary wisdom tooth with the crown slightly erupting from the gum was observed. Panoramic radiographs showed an erupting wisdom tooth in the right upper jaw (**Figure 1**). During the Straight Leg Raising (SLR) test, her right leg raised approximately  $90^\circ$  (**Figure 2**), and her left leg raised approximately  $80^\circ$  (**Figure 3**). She had no pain in her right hip joint when it was adducted and abducted. However, she experienced severe pain in her left hip joint when it was adducted (**Figure 4**). The Bi-Digital O-Ring Test (BDORT) [5] [6] was used to evaluate for grasping power. Her grasping power was found to be decreased (O-ring opened) when her cheek around the upper right wisdom tooth was pressed from the outside. In the O-ring test, when the body receives negative stimulation, grip strength decreases. The subject was also easily destabilized while the area was pushed (body balance check) [2]. Therefore, the erupting upper right wisdom tooth was extracted under infiltration anesthesia (**Figure 5**).



**Figure 1.** Right maxillary wisdom tooth with the crown slightly erupting from the gums (arrow).



**Figure 2.** During the SLR test, the patient's right leg raised approximately  $90^\circ$  before treatment.



**Figure 3.** During the SLR test, the patient's left leg raised approximately 80° before treatment.



**Figure 4.** The patient had severe pain in her left hip joint when her left hip joint was adducted.



**Figure 5.** Upper right wisdom tooth extracted under infiltration anesthesia.

### 3. Results

The patient's symptoms improved immediately after the tooth extraction. About 5 min after the procedure, the SLR reached approximately 120° on both sides (**Figure 6** and **Figure 7**), and the pain during adduction and abduction of the left hip joint disappeared. There was no recurrence of symptoms for at least one year after the procedure.



**Figure 6.** Five minutes after tooth extraction, the patient's SLR reached approximately 120° on her right side.



**Figure 7.** Five minutes after tooth extraction, the patient's SLR reached approximately 120° on her left side.

In order to watch the actual experiment described in this case, please watch the following YouTube video:

The condition of a patient's pelvic region improved after a wisdom tooth was removed:

<https://www.youtube.com/watch?v=pqHfozhUKl8> (last accessed 8/1/2025).

#### 4. Discussion

The subject experienced lower back pain when she stood for a long time. During the BDORT and body balance check [2], it turned out that her erupting upper right wisdom tooth was stimulating the inside of her cheek (buccal mucous membrane) and that this stimulation was causing pelvic joint abnormalities and lumbago symptoms. This tooth did not occlude the opposing tooth. Therefore, her symptoms were unlikely to be caused by malocclusion [7]-[9]. Her symptoms improved shortly after extracting her upper right wisdom tooth. Even if a tooth is still erupting, tooth extraction should be considered if it causes abnormal irritation to the oral mucosa and induces systemic symptoms, including lower back pain. The trigeminal nerve, located around the oral cavity, is the largest of the 12 pairs of cranial nerves, and the author hypothesizes that negative stimulation around the oral cavity had a negative effect on the brain, resulting in dysfunction

of the joints around the pelvis [10]. In the future, cooperation between dentistry and medicine will be needed to investigate why abnormal stimulation of the oral mucosa can cause systemic symptoms, including lower back pain.

## 5. Conclusion

This report presented a case of a young woman suffering from lower back pain, which was treated by extracting an erupting wisdom tooth. Her symptoms were thought to be the result of abnormal stimulation of the buccal mucosa. The mechanisms behind this condition are still unclear. Therefore, further research is needed to elucidate the underlying mechanisms.

## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

## References

- [1] Fujii, Y. (2015) Use of Dental Inlay for Treatment of Hip Joint Dysregulation: A Case Report. *Case Reports in Clinical Medicine*, **4**, 356-360. <https://doi.org/10.4236/crcm.2015.411072>
- [2] Fujii, Y. (2015) Dental Stimulation to the Buccal Mucous Membrane Causes Lumbago: A Report of Two Cases. *Case Reports in Clinical Medicine*, **4**, 289-296. <https://doi.org/10.4236/crcm.2015.48058>
- [3] Fujii, Y. (2016) Improvement of Systemic Symptoms after Dental Implant Removal. *Open Journal of Stomatology*, **6**, 37-46. <https://doi.org/10.4236/ojst.2016.62005>
- [4] Fujii, Y. (2019) Dental Treatment with a Gold Alloy Cast Crown for Severe Lumbago. *Open Journal of Stomatology*, **9**, 21-27. <https://doi.org/10.4236/ojst.2019.92003>
- [5] Yoshiaki, O. (1993) Bi-Digital O-Ring Test for Imaging and Diagnosis of Internal Organs of a Patient. US Patent No. 5188107.
- [6] Ozerkan, K.N. (2005) The Future of the Application of the Bi-Digital O-Ring Test in Sports Psychology. *Acupuncture & Electro-Therapeutics Research*, **30**, 53-56. <https://doi.org/10.3727/036012905815901352>
- [7] Watanabe, E.K., Yatani, H., Kuboki, T., Matsuka, Y., Terada, S., Orsini, M.G. and Yamashita, A. (1998) The Relationship between Signs and Symptoms of Temporomandibular Disorders and Bilateral Occlusal Contact Patterns during Lateral Excursions. *Journal of Oral Rehabilitation*, **25**, 409-415. <https://doi.org/10.1046/j.1365-2842.1998.00262.x>
- [8] Karppinen, K., Eklund, S., Suoninen, E., Eskelin, M. and Kirveskari, P. (1999) Adjustment of Dental Occlusion in Treatment of Chronic Cervicobrachial Pain and Headache. *Journal of Oral Rehabilitation*, **26**, 715-721. <https://doi.org/10.1046/j.1365-2842.1999.00448.x>
- [9] Gangloff, P., Louis, J. and Perrin, P.P. (2000) Dental Occlusion Modifies Gaze and Posture Stabilization in Human Subjects. *Neuroscience Letters*, **293**, 203-206. [https://doi.org/10.1016/s0304-3940\(00\)01528-7](https://doi.org/10.1016/s0304-3940(00)01528-7)
- [10] Fujii, Y. (2016) Two Cases of Severe Dementia Showing Dramatic Improvement after Denture Placement. *Advances in Alzheimer's Disease*, **5**, 46-52. <https://doi.org/10.4236/aad.2016.52004>