III IMAGES IN HEMATOLOGY

DOI: 10.4274/tjh.galenos.2024.2024.0342 Turk J Hematol 2025;42:59-60

Images of Temporomandibular Joint Arthropathy in Patient with Severe Hemophilia B with Inhibitor and Patient with Type III von Willebrand Disease with Inhibitor

İnhibitörlü Ağır Hemofili B Hastası ve İnhibitörlü Tip III von Willebrand Hastasında Temporomandibular Eklem Artropati Görüntüleri

🖸 Selda Yenel¹, 🖸 Dilek Aynur Çankal¹, 🕲 Zühre Akarslan², 🛈 Merve Yazol³, 🔀 Zühre Kaya⁴

¹Gazi University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery, Ankara, Türkiye
²Gazi University Faculty of Dentistry, Department of Oral and Maxillofacial Radiology, Ankara, Türkiye
³Gazi University Faculty of Medicine, Department of Radiology, Ankara, Türkiye
⁴Gazi University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Hematology, Ankara, Türkiye



Figure 1. Degenerative changes in the temporomandibular joint revealed by magnetic resonance imaging with proton density and T2 weighted images. The posterior zone of the right (R) temporomandibular joint disc shows thickness and a minor pathological signal increase, indicating degeneration. The mandibular condyles are slightly behind the normal temporal eminence while the mouth is open (MO) and closed (MC), indicating mobility restriction in this case of severe hemophilia B.



Address for Correspondence/Yazışma Adresi: Zühre Kaya, Prof., M.D., Gazi University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Hematology, Ankara, Türkiye E-mail: zuhrekaya@gazi.edu.tr ORCID: orcid.org/0000-0002-3798-7246 Received/Geliş tarihi: September 15, 2024 Accepted/Kabul tarihi: September 25, 2024

©Copyright 2025 by Turkish Society of Hematology Turkish Journal of Hematology, Published by Galenos Publishing House. Licensed under a Creative Commons Attribution-NonCommercial (CC BY-NC-ND) 4.0 International License.



Figure 2. Degenerative changes in the temporomandibular joint revealed by magnetic resonance imaging with proton density and T2 weighted images. The bilateral temporomandibular joint disc shows degeneration and an increase in signal, being more apparent on the left (L) side. When the mouth is both open (MO) and closed (MC), the right (R) mandibular condyle is slightly behind the normal temporal eminence, whereas the left mandibular condyle is much more behind in this case of type III von Willebrand disease.

We present the direct radiography and magnetic resonance imaging (MRI) results of two patients diagnosed with temporomandibular joint (TMJ) disorders. In the first case, a 25-year-old male patient with severe hemophilia B and a hightiter inhibitor was referred to the dental clinic. He exhibited mandibular prognathism and recurrent stammering. A panoramic radiograph revealed degenerative TMJ changes. The TMJ MRI indicated a thickening of the right articular disc's posterior band, signifying degeneration (Figure 1). Pharmacological medicines and physical therapy provided support for cognitive behavioral training. In the second case, a 35-year-old female patient with type III von Willebrand disease (VWD) and a low-titer inhibitor was referred to the dentistry clinic following rarely experienced jaw pain and TMJ crepitus sounds. Degenerative TMJ alterations were seen on her panoramic radiograph. The TMJ MRI showed anterior displacement and degradation in the bilateral TMJ disc (Figure 2). The treatment of this TMJ disorder was similar to that of the first case. A review of the literature revealed that MRIconfirmed TMJ arthropathy in a patient with type III VWD with a low-titer inhibitor is reported here for the first time [1,2]. We conclude that inhibitor status may have been an important risk factor for unusual site bleeding in both cases.

Keywords: Temporomandibular joint arthropathy, Hemophilia, von Willebrand disease

Anahtar Sözcükler: Temporomandibular eklem artropatisi, Hemofili, von Willebrand hastalığı

Ethics

Informed Consent: Informed consent was obtained from the patients.

Footnotes

Authorship Contributions

Concept: S.Y., Z.K., D.A.Ç.; Analysis of Interpretation: Z.A., M.Y.; Literature Search: S.Y., Z.K.; Writing: S.Y., Z.K., D.A.Ç.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

- Minervini G, Marrapodi MM, Tirupathi S, Afnan L, Ronsivalle V, Cervino G, Cicciù M. Prevalence of temporomandibular disorders (TMD) in bleeding disorders: a systematic review with meta-analysis. J Oral Rehabil. 2023;50:1535-1543.
- Yenel S, Çankal DA, Kayali SK, Akarslan Z, Çulha V, Kaya Z. Temporomandibular disorders in patients with inherited coagulation disorders: a clinical study. J Stomatol Oral Maxillofac Surg. 2022;123:473-477.