

## **Tinnitus with temporomandibular joint disorders: a specific entity of tinnitus patients?**

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### **Source**

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### **Abstract**

#### **OBJECTIVE:**

Tinnitus is frequently associated with temporomandibular joint (TMJ) dysfunction. However, the nature of the relationship is not fully understood. Here the authors compared 30 patients with a confirmed diagnosis of temporomandibular joint dysfunction and tinnitus to a group of 61 patients with tinnitus but without any subjective complaints of TMJ dysfunction with respect to clinical and demographic characteristics.

#### **STUDY DESIGN:**

Case-control study.

#### **SETTING:**

Tertiary referral center.

#### **SUBJECTS:**

Tinnitus patients with and without TMJ dysfunction presenting at the Department of Prosthetic Dentistry and the Tinnitus Clinic at the University of Regensburg.

#### **RESULTS:**

Tinnitus patients with TMJ disorder had better hearing function ( $P < .0005$ ), lower age ( $P = .001$ ), and lower age at tinnitus onset ( $P = .002$ ) and were more frequently female ( $P = .003$ ). Their subjectively perceived tinnitus loudness was lower ( $P = .01$ ), and more of them could modulate their tinnitus by jaw or neck movements ( $P = .001$ ).

#### **CONCLUSION:**

Classical risk factors for tinnitus (age, male gender, hearing loss) are less relevant in tinnitus patients with TMJ disorder, suggesting a causal role of TMJ pathology in the generation and maintenance of tinnitus. Based on this finding, treatment of TMJ disorder may represent a causally oriented treatment strategy for tinnitus.