

**Response to Autoimmune/  
inflammatory syndrome induced  
by adjuvant associated with a  
metal implant in the mouth;  
explantation was followed by  
recovery**

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**TO THE EDITOR,**

I am commenting on a recent article published in *IMAJ* (Autoimmune/inflammatory syndrome induced by adjuvant associated with a metal implant in the mouth; explantation was followed by recovery) [1].

The authors presented a patient who had a dental metal crown mounted on a tooth and one month later developed a systemic reaction (fatigue, xerostomia, sleep disorders, depression, hair loss, tinnitus, dizziness, facial pain, heart palpitation). The authors concluded that the case was consistent with criteria used to determine autoimmune/inflammatory syndrome induced by adjuvant (ASIA), and the dental crown might have been a trigger for ASIA in this patient [1].

The dental crown was described as a porcelain-fused-to-metal crown fixed on the tooth with dental cement. Under the crown the authors described an amalgam restoration (Hydrargyrum and metal particles) [2]. Each of these components may cause an autoimmune reaction but their cytotoxic and inflammatory effects were not studied by the authors.

The authors did not find or did not search antibodies or autoantibodies directed at the suspicious agent. A positive anti-nuclear antibodies (ANA) test was not proved. Tests used for the diagnosis of metal allergy (patch test, in vitro blood test, MELISA test) were not discussed. It is well known that ASIA is associated with a high incidence of ANA [3], which was not tested.

The authors did not demonstrate a cause-effect relationship for their diagnosis. They used only clinical findings for strengthening the diagnosis and neglected

laboratory objective tests. I did not find any proven pathologic relationship between the dental crown and ASIA in the present article.

In conclusion, a dental crown is not an implant as described by the authors. Rather, a dental crown is a prosthesis. It is a fixed dental prosthesis, as described and named in dentistry text books [4,5].

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**ASIA induced by adjuvant  
associated with a metal implant in  
the mouth: a response**

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**TO THE EDITOR,**

**D**r. Yuval Zohar, thank you for writing the interesting letter to the editor, including questions [1] in response to our article in *IMAJ* [2].

Autoimmune/inflammatory syndrome induced by adjuvant (ASIA) was not reported with specific autoantibodies. Recently we found that such conditions may be due to an imbalance of the autoimmune nervous system [3], thus explaining the peculiar clinical manifestation such as extreme fatigue, memory loss, cognitive impairment, and widespread pain [3].

Two very similar cases were reported following metal implants in hands [4]. In both patients the complaints vanished following the removal of the metal implants [5].

The mechanism of induction of these autoantibodies is the adjuvant effect of the material causing hyper stimulation of the immune system in a genetically prone subject [6,7].

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