Are there any scientific publications on the toxicity of endodontically treated teeth?

Two publications on the scientific validation of OroTox®.

1. Lechner J, von Baehr V.

Stimulation of proinflammatory cytokines by volatile sulfur compounds in endodontically-treated teeth". **International Journal of General Medicine,** March 2015

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Link in PubMed: http://www.ncbi.nlm.nih.gov/pubmed/25792853

Focus and conclusion: Local measurement of dental toxins on root-filled teeth with a teeth with an indicator for hydrogen sulfides (biogenic amines/thioethers/mercaptans) correlate in their sum/intensity with increasing sensitization of the immune system to these to these "dental toxins". In 182 patients with inflammatory systemic diseases sensitized to Merc/Thio systemic diseases, removal of the toxically acting teeth demonstrably reduces this immunological sensitization demonstrably.2. Lechner J, Mayer W.

Mitochondrial Function and Root-Filled Teeth – Detrimental and Unknown Interfaces in Systemic Immune Diseases. ***Int J Gen Med.*** July 2020;13: 387-402. https://doi.org/10.2147/IJGM.S258170

Free PDF Download: https://www.dovepress.com/articles.php?article_id=55224.

Over 3,544 views by July 2021.

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Background: The discussion about the possible toxic effects of root-filled teeth is very old. old. Only rarely, however, is a possible reduction in ATP-activity at the mitochondrial membrane by the discussed tooth toxins is included in the question.
More recently, a so-called mitochondropathy has been linked to numerous immunological systemic diseases. However, the dentist has only a few methods available to assess toxin delivery to the tooth.

Purpose: Here, an experimental-clinical study design will be used to investigate, to what extent extracted RFT release dental toxins into solution and reduce the provision of ATP at the patient's mitochondrial membrane of the patient.

Material und Methods: RFT are determined for their local toxin release with an indicator for volatile sulfur compounds semiquantitative (VSCI) and extracted. These RFT are placed in aqua bidest at room temperature for 24 hours and removed. The resulting solution (Tox-sol) is diluted 1:100, tested in the laboratory with a Peripheral Blood Mononuclear Cell (PBMC) fraction from the patient. The remaining ATP-activity is measured at the mitochondrial membrane and compared with the neutral ATP-activity of this subject. This process is performed on 30 subjects.

Ergebnisse: The total collective shows a reduction of ATP-activity by about 10 % after 24 h exposure to the Tox-sol. Three groups emerged with strongly reduced (n=16), neutral (n=10) and even increased (n=4) ATP-activity. In four different disease groups (rheumatism, neurology, allergy, tumor) show equivalent inhibitions of ATP-activity, without preference of a specific disease.

Discussion: The study design is limited to an exposure period both in the Tox-sol as well as in the PBMC fraction to 24 h. In fact, this exposure in the patient's mouth for years and may thus be potentiated. Disease-specific effects of the Tox-sol are not evident.

Conclusion: The Tox-Lsg causes in the short exposure time of 24 h and in a dilution of 1:100 in 50% of the subjects a reduction of the ATP- availability by a median of about 15%. A practical VSCI shows directly at the RFT reliably indicates the toxic sulfur compounds. RFT can thus be considered as a possible contribution to mitochondropathies.