Author's response to reviews

Title: Short time administration of antirheumatic drugs - Methotrexate as a strong inhibitor of osteoblast's proliferation in vitro.

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Version: 2 Date: 3 August 2012

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Dear Editors-in-chief

Please find attached our manuscript “Short time administration of antirheumatic drugs - Methotrexate as a strong inhibitor of osteoblast`s proliferation in vitro”.

This experimental research study describes the effects of different concentrations of methotrexate (MTX) on proliferation of osteoblasts in vitro over a period of 14 days in detail. Our results show a strong and dose-independent inhibition of proliferation within usual therapeutical serum levels of MTX-concentrations from 1 to 1000 nM, determined using various methods (counting of living cells, immunostaining and measurement of mitochondrial activity by MTT-assay), without disturbance of differentiation by MTX. MTX-concentrations lower than 0,1 nM showed no inhibitory effects on osteoblasts. To our knowledge, this is the first publication that describes this MTX effects in this way and in the surrounding of cranio-maxillo-facial surgery.

Inhibition of osteoblast proliferation is an important finding with regard to various mechanisms concerning bone healing, especially after bone surgery, e.g. resections or osteosynthesis and with special interest in oral and maxillofacial surgery (tooth extractions, dental implants).

We believe this manuscript to be of scientific and clinical interest to many readers of the HEAD&FACE MEDICINE JOURNAL and hope it is suitable for publication.

This article has not been published and is not under consideration for publication elsewhere, there exists no financial or other relationship concerning conflict of interest and the manuscript has been read and approved by all of the authors.

Yours sincerely

Tobias Annussek