## SERIAL MEASUREMENTS OF EXHALED NITRIC OXIDE (ENO) AT WORK AND AT HOME – A NEW TOOL FOR THE DIAGNOSIS OF OCCUPATIONAL ASTHMA

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Whereas serial measurements of lung function at work and at home are a well-known diagnostic tool for the diagnosis of occupational asthma (OA), little is known about the serial measurements of non-invasive parameters like exhaled nitric oxide (eNO). A non-atopic 51-yr-old baker with variable shortness of breath without relation to work was examined for suspected OA. Skin prick test showed weak sensitizations to wheat and rye flour that were corroborated by in vitro-testing (CAP class 3). Baseline FEV 1 of 58 %predicted and a decrease of FEV 1 after placebo (sugar powder) of 17 % did not allow inhalative challenge testing. The patient performed daily measurements of FEV 1 and eNO for about a month during a holiday at home and at work. Whereas symptoms and FEV 1 did not show differences between holidays and work periods, eNO showed a clear increase from below 10 ppb to a maximum of 75 ppb. A diagnosis of baker's asthma was made, and the patient quit his job immediately. A year afterwards, the patient's symptoms had improved and FEV 1 had increased to 73 %predicted. We conclude that serial measurements of eNO at home and at work may be a useful tool for the diagnosis of OA.