

(NAG, IAP, microalbumin, β 2micro, RBP) and oxidative stress markers (d-ROM, AOPP, GPx, SOD, 8-OHdG) were measured as well.

Results Significantly higher geometric mean levels (s.e.m.) of Cd-B (1.64 (1.11) vs 0.23 (1.17) μ g/l), Cd-U (0.71 (1.24) vs 0.14 (1.16) μ g/g creatinine) and Cu-U (5.55 (1.08) vs 4.55 (1.06) μ g/g creatinine) were found in exposed workers than in control subjects. In addition, significantly increased levels of IAP were found among exposed workers. Also, higher levels (not statistically significant) of d-ROM, AOPP, SOD, and 8-OHdG were detected in exposed subjects than in control subjects.

Conclusions The results suggest relatively low occupational exposure levels to heavy metals. Nevertheless, Cd-B, Cd-U and Cu-U were significantly higher in exposed subjects, as well as levels of IAP, a marker associated with Cd toxicity. In addition, elevated levels of oxidative stress markers were found among exposed workers, though not significantly higher than among non-exposed subjects.

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EVALUATION OF HEAVY METAL EXPOSURE IN BLOOD AND URINE OF WORKERS PERFORMING SILVER BRAZING

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Objectives Silver brazing activities expose workers to metal fumes of which the health effects are not well studied yet. The aim of this study was to assess a number of biochemical parameters (heavy metals, renal markers, and oxidative stress markers) in workers performing brazing with silver alloys.

Methods Blood (B) concentrations of Pb, Cd, Mn and urine (U) concentrations of Cd, Mn, Cu and Zn were determined in 40 refrigeration industry workers frequently brazing with silver alloys and 31 non-exposed control subjects. Renal markers