

Results of DMSA long-term supplementation in lowering lead blood level

Siwiec Ewa¹, Lubiński Jan²

¹Medycyna Diagnostyczna Pomorskiego Uniwersytetu Medycznego Sp. z o. o.;

ewa.siwiec@pum.edu.pl

²Zakład Genetyki i Patomorfologii Pomorskiego Uniwersytetu Medycznego w Szczecinie;

jan.lubinski@pum.edu.pl

INTRODUCTION: Our previous study showed that DMSA may be used for effectively lower blood lead concentration and does not cause serious adverse effects.

AIM OF THE STUDY: Results of DMSA long-term supplementation in lowering lead blood level. Long-term supplementation – at least 3 months of DMSA supplementation within 6 months period.

STUDY GROUPS

- 1. healthy women BRCA1(-) and Pb concentration > 7,5 µg/L, n=15**
- 2. healthy women BRCA1(+) and Pb concentration > 8,0 µg/L, n=7**
- 3. healthy men and Pb concentration > 13,5 µg/L, n=22**

RESULTS: After long-term supplementation the average value of Pb blood concentration in comparison to initial value was lower by 42,3%, 45,83% and 45,35% in BRCA1(-), BRCA1(+) and men group, respectively. In most cases of BRCA1(-) and BRCA1(+) groups the average value of Pb concentration was higher than the target level, although in male group the average value was lower in 50% subjects.

CONCLUSIONS: During long-term period, we observed a decrease in Pb blood concentration after each month of supplementation and an increase in Pb blood level after supplementation free months. Supplementation decreased exposure to high Pb blood levels although this requires further studies to find out if it can lower cancer risk.