Synopsis of Original Research Paper

Leaded face powder used in 19–20th century in Japan

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Prevalence of non-infectious encephalopathy was high among children in *Meiji* and *Taisho* era in Japan. It had turned out that lead poisoning due to the use of face powder by their caretakers was the cause. In this study seven face powder samples, manufactured during *Meiji* era, were analyzed for lead by inductively coupled plasma mass spectrometry to characterize lead in those historic samples. Four of the 7 samples contained lead at elevated levels (17-55%) and the other one sample contained at moderate level (0.35%). Lead was not detected in the rest of the samples. Lead isotope ratios ($^{207}Pb/^{206}Pb$ and $^{208}Pb/^{206}Pb$) of the leaded face powders indicated that the face powder of those days contained lead either from Japanese or Australian ores. The lead isotope ratios were consistent with those in human hair of those days suggesting that leaded face powder was one of major contamination sources of lead of Japanese people of those days.