Summary & Conclusion

SUMMARY AND CONCLUSION

Lead is one of the oldest recognized environmental pollutant and human toxin. It serves no known useful purpose in the body. Throughout life humans accumulate lead in their bodies based on their exposure. Sources of lead are multiple, that they are difficult to appraise. In additon to the natural occurrence of lead in rocks, soil, water, air and plants, lead is also produced artificially. Artificial sources include : industry, paints, gasoline, toys, shots, bullets, leaded jewelery, improperly glazed earthenware, facial cosmetics and inks used in typing. Also lead was found in every food item. Children absorb 40-50% of dietary lead compared to 5-10% absorbed by adults. Furthermore, children are exposed to a special hazard from environmental sources due their mouthing activity.

Signs and symproms of lead toxicity depend on the lead level and age but more subtle effects apparently occur in both age groups at a lower level than previously recognized. These vague manifestations include: irritability, moodiness, loss interest in leisure time activities, frequent absence from school, anorexia and occasional vomiting.

A silent epidemic has been observed among children exposed to environmental lead where the impact was in the form of lead gastrointestinal tract disorders and renal troubles.

Egypt is considered of high and uncontrolled degree of pollution, as strict precautions did not go hand in hand with modernization. This work is directed, therfore to study aspects of this phenomenon in infants in Banha.

From this study, the following was concluded:

1. The mean blood lead level was significantly increasing with age.
2. It also, increasing with pollution and urbanization.
3. There is a difference between lead level in maternal blood and infant blood.
4. There is direct relationship between lead level in maternal blood, breast milk and infant blood in rural areas.
5. There is only, direct relationship between lead level in maternal and breast milk in urban areas.
6. There is no relationship between lead level of infant blood from one side and lead level of maternal blood or breast milk from other side.
7. Lead level of cow's milk is similar to buffalo's milk.
8. Mean lead level of breast milk is lower than that of fresh milk.
9. Mean lead level of artificially fed infants is higher than that of beast fed infants.