

Mercury and Reproductive Damage: Population Control

German Scientists Reveal Mercury Amalgam Affects Human Fertility

In a cell culture experiment, mercury affected hormone production at low concentrations.

A link has been found between mercury and hormone disturbances, immune disturbances, recurrent fungal infections, hair loss and allergies. The differences are large. Allergies and hair loss are 2-3 times as common in the high-mercury group. These recent results confirm earlier findings from Heidelberg on mercury and fertility. According to the researchers, mercury exposure leads to hormone and immune disturbances that can reduce fertility.

In a cell culture experiment at the Tuebingen University gynecological clinic, mercury affected hormone production at low concentrations. The concentrations were so low that cell vitality was otherwise almost unaffected.

Professor Ingrid Gerhard and her co-workers and the university gynecological clinic in Heidelberg have examined more than 1000 patients for mercury, fertility problems and symptoms. Mercury was measured after giving a so-called chelating agent known as DMPS. This substance mobilizes mercury from tissues, particularly the kidneys, so that it is excreted in the urine where it can be measured.

The high-mercury group had more hormonal disturbances, immune disturbances, recurring fungal infections, hair loss and allergies. A number of different hormonal disturbances were found, sex hormones among them. All these differences were statistically significant and some very marked. Allergies and hair loss were 2-3 times more common in the high-mercury group.

The doctors at the clinic have successfully treated fertility problems with a combination of vitamins/minerals and amalgam removal.

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Mercury In Mothers' Milk - Risk To Infants!

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A newly published study has firmly established the presence of mercury from dental amalgam in the milk of nursing females! [Vimy, MJ; et al, 1997] Since this is a matter of the utmost importance, BioProbe has reviewed the existing literature on the subject, with the pertinent studies abstracted below in the Science section.

Several studies have already established the transfer of dental amalgam mercury into the tissues of unborn babies, in both animals and humans. [Vimy, MJ; 1990; Drasch, G; et al, 1994] The study on humans by Drasch and associates concluded: "Future discussion on the pros and cons of dental amalgam should not be limited to adults or children with their own amalgam fillings, but also include fetal exposure. The unrestricted application of amalgam for dental restorations in women before and during the child bearing age should be reconsidered." The publication of these studies has already resulted in the issuing of government advisories against the use of mercury amalgam dental fillings in pregnant females (Germany, Sweden and Canada). In Germany, public opinion is encouraging a ban on the use of dental amalgam in all fertile women. The current research on amalgam mercury in breast milk adds further evidence to the wisdom of such an action.

The ability of metal ions to concentrate in mothers' milk has been scientifically established for years, as has the ability for methyl mercury to transfer to breast milk and cause neurologic damage to infants. [AminZaki, L; et al, 1981] The investigation of the possible transfer of mercury specifically from amalgam dental fillings to mothers' milk began in 1990. A study by Vimy and associates implanted amalgam fillings, seeded with radioactively labeled mercury, into pregnant ewes. [Vimy, MJ; et al, 1990] Since radioactively labeled mercury does not occur naturally, it was possible to detect mercury in tissues that was specifically derived from the amalgam dental fillings. The amalgam mercury was found to quickly accumulate in tissues of mothers and fetuses. In the lactating ewes, the levels of labeled mercury in milk were as much as six times higher than the levels of labeled mercury in their blood.

The current study [Vimy, MJ; et al, 1997] evaluated mercury related to amalgam dental fillings transferring to breast milk in both animals and humans. In the animal study, lactating ewes with amalgam fillings nursed foster lambs from ewes without amalgam fillings. The amalgam fillings contained a portion of radioactively labeled mercury, which was found in the tissues of the foster lambs. This confirmed the transfer of mercury from the amalgam fillings of the mothers, into the breast milk, then into the tissues of the foster lambs. The human study examined mercury levels in breast milk of 33 lactating women. The mercury levels correlated with the number of amalgam fillings or mercury vapor concentration levels in mouth air. The infant exposure levels were compared to the United States Public Health Service Minimal Risk Level (MRL) standard for adults, and caution was urged. The combination of prenatal mercury exposure and lactating exposure to maternal amalgam mercury was addressed. Other important factors addressed were mercury exposures related to the differences in body mass between infants and adults and the particular sensitivity of infants to heavy metal toxic effects. This latter concern has also been pointed out by other authors. [Schümann, 1990]

By 1995, the comparison of activity of different forms of mercury had been investigated. [Schümann, K, 1990; Yoshida, M; et al, 1994; Oskarsson, A; et al, 1995] It has been found that any form of mercury can transfer to breast milk and, from there, into the tissues of infants, although the fat soluble forms of mercury (methyl mercury and mercury vapor) will concentrate more in brain tissue of infants. The Schümann study pointed out that milk increases the bioavailability of Hg⁺⁺ as the ionic mercury is bound to a greater extent in the red blood cells of the suckling infants. In an evaluation of lactating human females, the study by Oskarsson and associates found that dental amalgam mercury transferred to mothers' milk, but that methyl mercury from consumption of fish correlated to mercury levels in blood but not to levels in milk. In the portion of the study on rats and mice, the mercury was found to cause pathologic effects in the offspring, including alteration of the thymocytes, increased lymphocyte activities, and effects on noradrenaline and nerve growth factor in the developing brains. These effects occurred in the animals exposed to methyl mercury.

It has been well established scientifically that mercury vapor, being lipid soluble, functions very similar to methyl mercury pathologically. There have been other studies confirming the harmful effect of mercury vapor on unborn babies and developing infants. [Danielsson, BR; et al, 1993; Warfinge, K; et al, 1994; Fredriksson, A; et al, 1996] It should be emphasized that the studies cited herein clearly show that mercury damage to unborn babies and infants is not readily observable early on. The neurologic damage is developmental in nature, primarily effecting learning, behavior and neurologic function. These effects can dramatically alter the functioning of the individual throughout life. Early exposure to inorganic or organic mercury can even result in mental retardation. [Schümann, K, 1990]

In a subsequent study, Oskarsson and colleagues confirmed the accumulation of dental amalgam mercury in mothers' milk. [Oskarsson, A; et al, 1996] This study found that amalgam mercury dental fillings were the main source of mercury in the milk of lactating humans, related the exposure to the World Health Organization standard for daily intake for adults, and concluded it to be significant enough to be a risk to infants.

At this point, the scientific evidence clearly establishes that mercury transfers from amalgam dental fillings to the tissues of unborn babies and to mothers' milk, from the milk to body tissues of infants, and, according to existing standards, presents a health risk to the infants. The combination of prenatal exposure and neonatal exposure from nursing presents an undeniable concern. Oskarsson and associates [1996] stated: "We concluded that efforts should be made to decrease mercury burden in fertile women." Since amalgam dental fillings have now been identified as a significant, if not the major, contributor of mercury in mothers' milk, the formal regulatory limitation of amalgam fillings in fertile women is clearly indicated! BioProbe now calls upon all responsible public officials to immediately initiate action to protect unborn babies and infants from the scientifically proven health risk of mercury exposure from the amalgam fillings of their mothers. The use of mercury amalgam fillings in all fertile women should be banned forthwith!

More References

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