

REBECCA DUTTON

A History of Occupational Exposure to Mercury

Thirty eight years ago I was employed by a dentist as a practice manager and nurse. I was solely responsible for the running of the practice and was employed for three years in this capacity – 1971 -1974.

I spent many hours each day mixing mercury/amalgam fillings in a rubber finger stall, exposed to mercury vapour from the action of rubbing silver alloy and mercury together. I had no personal protection equipment, i.e. gloves, mask or cover over the mercury and no ventilation system. If I spilt the mercury, I simply wiped it up with a cloth. Any surplus amalgam was stored in an uncovered pot in a drawer, along with the liquid mercury. The only way I could see if the amalgam were to the correct consistency was by peering into the finger stall. In the seventies, dental amalgam was the cornerstone of dentistry as it was durable, easy to use, and inexpensive. It has been extensively employed as a tooth filling material since the early 19th century. It is composed of 50% mercury, silver, copper, tin and sometimes zinc.

When I became pregnant during the latter part of my employment, my duties remained the same, apart from not being present when x-rays were taken.

I had a long, difficult birth but my daughter, Katie, appeared to be reasonably well apart from allergies, eczema and sinus problems. At the age of sixteen, she started to complain of backache; four doctors' gave varying opinions, including 'sciatica' and 'growing pains'. Unhappy with these diagnoses I arranged for my daughter to see a spinal surgeon and she was duly diagnosed with Scoliosis. She underwent several more tests including a myelogram, x-rays, lumbar puncture, nerve tests and an MRI scan, which showed a syrinx (a cavity) in the lumbar region of her spinal cord. Katie's neurosurgeon diagnosed Syringomyelia, a progressive condition, usually caused by a spinal tumour or hindbrain hernia but she had neither.

Unsure of the diagnosis, we arranged for Katie to have a second opinion from another consultant neurosurgeon. He disagreed with the first diagnosis and was rather mystified as to why Katie had developed a syrinx in her spinal cord. I firmly believe this was the result of her being exposed to mercury in my womb.

There are many research studies which state neural tube defects are the result of being exposed to mercury and develop during the first 4 weeks of pregnancy. Neurotoxins have the ability to interfere with several stages of central nervous system maturation including individual brain cell growth, closure of the spinal cord and the formation of the countless interconnections of the nervous system throughout the body.

Katie had major spinal surgery which involved the removal of five discs, a rib and the placement of a titanium rod in the lumbar region of her spine. During the seven hour operation, her heart struggled and she nearly died. She spent two weeks on a special bed to rotate her body and then a further six months in a plaster cast.

Twelve months later, Katie had a second MRI scan, which showed that the syrinx had completely disappeared. This baffled her neurosurgeon as Syringomyelia is a progressive condition, so he decided it was a rare case of a syrinx without a known cause.

My second pregnancy in 1977 was also difficult as I gave birth to a ten pound baby. The placenta was two pounds, which I know indicates a problem. Mercury can affect birth weight and size as it reduces the blood's ability to carry oxygen. Overweight placentas are associated with consequences of acute ante-natal hypoxia – in other words, not enough oxygen reaches the foetus. My son was also aggressive and hyperactive as a child and throughout his teens.

In November 2004, after many years of suffering from insomnia and depression, I was diagnosed with chronic mercury toxicity by an allergy specialist. Taken aback by these findings, I decided to consult a doctor in Leicestershire, who specialised in mercury related illnesses such as Multiple Sclerosis. He agreed with the allergy specialist's diagnosis and decided to do a further specific test, the 'Kelmer test.'

Here, the levels before and after administration of DMSA (Dimercaptosuccinic acid) were taken. DMSA releases mercury by chelation and the amount released gives an indication of body burden.

This test produced an increase of 857% in my mercury levels. In addition, it made me feel very unwell, with hallucinations and memory loss. (This test is no longer available in the UK) Such tests can be extremely dangerous for sensitive patients as they produce a lot of free mercury to flow around the body. Added to which, the kidney is not designed for mercury excretion and can be damaged when mercury is forced through it.

The initial test showed I had a mercury level in urine of 3.0mcg/l and a creatinine level in urine of 6.7mmol/l. (mercury/creatinine ratio 2.23 nmol Hg/mmol creatinine) After taking dimercaptosuccinic acid, I had a mercury level in urine of 6.0 mcg/l and a creatinine level in urine of 1.4 mmol/l (mercury/creatinine ratio 21.39 nmol Hg/mmol creatinine)

Unfortunately, at this stage, I was unaware of the Melisa Test. This is a blood test that measures very accurately, the sensitivity or allergy type response to a host of different metals and pollutants.

I started IV therapy with large doses of vitamin C, in February, 2005. My doctor also prescribed vitamin and mineral supplements including very high

doses of selenium, which I couldn't tolerate. I was advised to have all my amalgam fillings removed in order to complete the detoxification.

My treatment was carried out by a mercury-free dentist in the UK. It involved the removal of twelve amalgam fillings and a piece of amalgam which was surgically removed from my jaw bone. During this ten day period, I continued with further intense chelation involving intravenous vitamin C, combined with glutathione. My amalgam fillings were replaced with composites and ceramic inlays.

Many of my symptoms improved after treatment, especially insomnia, depression and memory.

I had menstrual problems for years which culminated in an early hysterectomy at 38, due to a condition caused by low progesterone. Mercury lowers progesterone levels, which may result in premenstrual syndrome and infertility, common in female dental nurses. I also suffered from hand tremor, insomnia, depression, nervousness, IBS, memory loss and anxiety. Liver and gallbladder congestion are major issues in states of toxicity and I had a cholecystectomy, plus removal of 76 gall stones, in 1997.

New research in New Zealand has shown that a quarter of dental nurses working before 1974 have had hysterectomies after handling mercury amalgam for tooth fillings – around four times the rate expected for women in their age bracket.

Massey University psychology lecturer Dr Linda Jones also found the dental nurses suffered side effects including anxiety, sleep disturbance and hand tremors after handling the mercury amalgam. Dental nurses who had mixed the amalgam by hand before the practice was stopped in 1974 had a far higher rate of needing hysterectomies than the general population of women, as well as other troubles. "Difficulty with conception, having children with birth defects, having children with learning difficulties – the dental nurse group were over-represented in those categories."

On top of Katie's neurological condition and Scoliosis she has had menstrual problems, backache, allergies, Reynaud's syndrome and fatigue.

I have spent the past 6 years corresponding and working with scientists, doctors and dentists from around the world - all extremely knowledgeable about mercury and mercury related illnesses. Their articles and studies are on this website.

Norway banned mercury from January 1st 2008 and Sweden, from 1 June 2009. Denmark has announced intentions to do the same. In Norway environmental protection was given as the reason for the ban, but strict restrictions on the use of dental amalgam were already in place since July 2003, for both health and environmental reasons. Amalgam separators have been mandatory in dental clinics in Norway since 1995. This raises the

question: Is the human body part of the natural environment? Why should the natural environment be protected from mercury, but not the human body?

The Norwegian 'whistleblower' Tordis Klausen, was exposed to such high levels of mercury vapour that she now has toxic encephalitis. She has helped thousands of women realise that their health problems were caused through occupational exposure to mercury. I am trying to do the same here in the UK.

I persuaded Professor Bjorn Hilt, the leading researcher for the Norwegian dental personnel, to write an article for the British Association of Dental Nurses autumn journal, 2007, on the dangers of handling mercury. The Health and Safety Officer of the BADN hopes the article will encourage researchers to investigate the impact of mercury exposure on dental personnel. The UK is sadly lagging behind other countries with research into occupational effects of mercury.

Governments and health authorities around the world have known for over 50 years the dangers of handling mercury without any protection, yet they still knowingly allowed women to handle it.

Nobody wants to admit to this terrible negligence for fear of litigation – money, not health it seems, is once again the bottom line here.

Having a deleterious substance in my body for over 30 years created havoc but more importantly, affected the health of my daughter. However, we are now completely mercury free, after intensive treatment without the use of drugs or chemicals.

Last year, Professor Vera Stejskal invited me to work with the Melisa Foundation, dedicated to the science of metal allergy and its diagnosis –

<http://www.melisa.org/personnel.php>

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