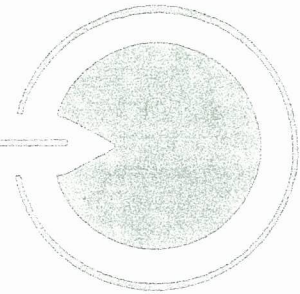


# BIO-PROBE

# NEWSLETTER



Volume 10

September 1994

Issue 5

## BBC "PANORAMA" ON DENTAL AMALGAM "POISON IN THE MOUTH"

On 11 July 1994, BBC's "Panorama" presented a 40 minute program on dental amalgam entitled "Poison In The Mouth". The program featured the findings and views of medical scientists recognized as authorities on mercury. The representatives of the British Dental Association were shown as admitting their lack of knowledge of the published findings of the scientists. At best, their response to the scientists was inadequate.

The program stirred considerable interest in the United Kingdom. Representatives of British dentistry complained to the press that the program was one-sided. A response from Panorama reporter Tom Mangold, printed in the London Times on 19 July 1994, countered that the "good news" on dental amalgam was not ignored; Panorama sought it out, but found that there was none. Mr. Mangold detailed the weakness, or rather absence, of scientific foundation for the position that mercury exposure from dental amalgam is harmless.

In an effort to achieve damage control, the Chief Executive of the British Dental Association (BDA) published a rebuttal to the Panorama program in the August 1994 edition of "BDA News". This article, along with response from Bio-Probe follows.

### SCIENCE UPDATE

#### FROM THE CHIEF EXECUTIVE'S PEN The Panorama Programme

Manifestly we did not come over well; and our discomfiture has only been reduced a little by subsequent press and radio coverage which has been far more balanced.

One of the most helpful articles appeared in The Times of July 14th in which Dr. Simon Wessely challenged the scare story on amalgam.

Although it was obviously not apparent, before the prerecorded interview we did delve very deeply into all the available literature and were prepared to deal with the research from Vimy, Lorscheider, Drasch and others as well as questions that might have been posed on many other aspects on the use of amalgam. We had rehearsed the arguments and, of course, during the recording many of these points were made but were not selected for transmission. Specifically:

- **Echeverria's** neurobehavioural work on USA dentists who have raised mercury urine levels as a result of poor mercury hygiene in their surgeries is potentially important. We were aware of it before the Panorama interview and indicated that we would actively need to review it when it is published.
- **Aposhian's** work suggesting a link with Alzheimer's disease has still not been traced on Medline, or given to the BDA by Panorama. Aposhian has published research on mercury excretion levels and the relationship with the number and size of amalgams. Similarly a Medline search on Haley's work shows eight papers since 1990 but none on amalgam hazards.

### Table of Contents

BBC-TV "Panorama" Update.....	1
The Chief Executive of the BDA responds to Panorama.....	1
<b>ABSTRACTS</b>	
Mercury burden of human fetal and infant tissues. Drasch et al.....	5
Transcellular water transport in lung alveolar epithelium through mercury-sensitive water channels. Folkesson et al.....	6
Mercury Kinetics in a case of severe mercuric chloride poisoning treated with Dimercapto-1-propane sulphonate (DMPS) Toet et al.....	6
The influence of amalgam on immune response of gum tissues. Prajitno M.....	7
In vitro cytotoxicity of gallium alloy GF. Denden JM et al.....	7
<b>FORUM</b>	
IAOMT 10 ANNIVERSARY MEETING.....	7
IAOMT - United Kingdom. The toxic effects of mercury in the body.....	8
British Homeopathic Dental Association in England.....	8
American Academy of Biological Dentistry in Mexico "Dentistry, Life and Death" Biological Dentistry.....	8
17th National dental seminar in homeopathy, in Illinois.....	8
© 1994 by Bio-Probe, Inc. The Bio-Probe Newsletter is published bi-monthly. Editorial office is at 5508 Edgewater Dr., Orlando, FL 32810. Subscription price \$65.00 per year. Postage paid at Orlando.	

### □ Bio-Probe Response:

It is apparent that the Chief Executive (who incidentally is the same John Hunt interviewed on the Panorama programme), nor his staff, reevaluated the Panorama programme prior to writing this parody. To start with, Professor Aposhian has not actively worked on any relationship between mercury and Alzheimer's disease. What he has done is study the efficacy of DMSA and DMPS in removing mercury from the body; and on the relationship of dental mercury to total mercury body burden. Dr. Aposhian's research has demonstrated that mercury from amalgam dental fillings has a direct relationship to total mercury body burden and the number and size of amalgam dental fillings. In fact, the findings showed that approximately two-thirds of the total mercury in the body of the subjects came from their amalgam dental fillings.

The Chief Executive then goes on to state that "Haley's work shows eight papers since 1990 but none on amalgam hazards." This is apparently an effort to leave an erroneous impression on the reader concerning the significance of Professor Haley's work. It is true that Professor Haley's studies were not on amalgam. His studies involved the role of heavy metals and the CSF and brain; the results of his studies did, however, demonstrate a probable involvement of mercury in physiological and biochemical disturbances in the CSF and brain. Although not aware of it at the time most of his research was being done, Professor Haley is now acutely aware of the fact that the source of most mercury in the brain is amalgam dental fillings.

- **Friberg** has two publications since 1990 on Medline. One is a review article on biological monitoring, with no references to specific metals. The other is about primate exposure to methyl mercury, with no mention of amalgam. Friberg was quoted as a "WHO consultant." Like other researchers interviewed by Panorama their advice to WHO has not so far resulted in a WHO recommendation to member governments to cease use of amalgam. In 1991 Friberg prepared the first draft to Environmental Health Criteria for Inorganic Mercury, published by WHO jointly with the UN Environment Programme and the International Labour Organization. The distinguished international panel concluded 'recently, there has been an intense debate on the safety of dental amalgams and claims have been made that mercury from amalgam may cause severe health hazards. Reports describing different types of symptoms and signs and the results of the few epidemiological studies produced are inconclusive.'

### □ Bio-Probe Response:

Professor Dr. Lars Friberg has, for more than 30 years, been considered by most scientists, toxicologists, and medical researchers to be one of the foremost experts in the world on mercury toxicology. I find it extremely interesting that the Chief Executive felt it important to go

back in time when he was searching for pro-amalgam committee reports but felt compelled to limit his search of Professor Friberg's work to 1990 forward. Further, he makes no mention of the fact that Professor Friberg retired in 1991, as Chief of the Institute of Environmental Medicine and the Department of Environmental Hygiene of Sweden's Karolinska Institute, one of the most prestigious research facilities in the world. Had the Chief Executive been a little more liberal in his search for Professor Friberg's published studies I am sure he would have noted that in 1969, a distinguished international committee, of which Dr. Friberg was Chairman, published a major study defining the "Maximum allowable concentrations of mercury compounds (MAC Values), which, was one of the first definitive studies on exposure values for mercury vapor. In 1972 a classic text book was published titled "Mercury in the Environment. An Epidemiological and Toxicological Appraisal the editors of which were Friberg L. and Vostal J. In 1973, again as Chairman of the task group, a 42 page study was published "Accumulation of toxic metals with special reference to their absorption, excretion and biological half-time. Further, in 1986, Lars Friberg was the lead author on a major scientific paper demonstrating a direct correlation between the numbers and size of amalgam dental fillings and the degree of mercury contamination in the brain. Or, that Lars Friberg was the Chairman of Sweden's Expert Commission which spent 18 months investigating the toxicological effects of dental mercury and concluded: "From a toxicological standpoint amalgam is not a suitable dental material." Or, that the same WHO report Mr. Hunt so eloquently quotes in his behalf, also clearly demonstrated that dental mercury is the greatest source of mercury exposure to the general population, far exceeding the amount of mercury contamination of the human body attributable to fish consumption.

- **Vimy and Lorscheider's** animal work suggesting risks from amalgam use in pregnancy is published and well known. We fully accepted that some mercury from existing restorations and from the placement of fillings during pregnancy does reach the foetus or child from blood and maternal milk.

However, studies of dental surgery assistants, women dentists and dentists' wives have failed to find any link between the incidence of spontaneous abortion or non-congenital abnormalities and mercury exposure in the dental environment.

This is an important area for research and further studies are needed. At present, however, there is no evidence of pregnancy problems in the population at most obvious risk.

### □ Bio-Probe Response

Sweden and Germany have both issued advisories warning against the use of amalgam for women of child bearing age and to also restrict dental work during