



MCS-AWARE.org
The charity for environmental illness

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Re: Dentistry for the Chemically Sensitive Patient

Dear Sir/ Madam,

Your patient has Multiple Chemical Sensitivity (MCS) and may also have Electro-Hypersensitivity (EHS). His/her immune and detoxification systems do not work properly. They are unable to process toxins (xenobiotics) efficiently and because of this they are likely to react to very low levels of drugs and chemicals that healthy people would not even notice. They may react to very low levels of Volatile Organic Compounds (VOCs) and medicines via inhalation as well as ingestion and contact. The effects of MCS and EHS are cumulative and can result in severe allergic-type reactions affecting any body organ or system. Reactions can be immediate or delayed depending on the chemicals and the body systems involved. Each reaction increases the likelihood of further, more severe reactions including anaphylaxis. Amalgam fillings can make patient's health worse, but removal should not be carried out with very ill patients unless it has been approved by their specialist. Options are included below. Sensitivities vary according to the individual so please consult your patient about their particular needs.

To help we have listed some information that will apply to the severely affected patients. We have also included a page of general notes about emergency treatment, as patients may not respond in the usual way.

If you require any more information please email us: info@mcs-aware.org.

Yours faithfully,

Alicia Hurrell,
Manager

MCS-Aware.org
Registered Charity No: 1152139



Information for Dentists

The following article is from the Amalgam and Mercury-free Dentistry FAQ. Most of the following information for the hypersensitive patient, was taken from a special letter by Environmental Illness specialist Alfred V. Zamm, M.D., FACAI, FACP, 111 Maiden Lane, Kingston, NY 12401-4597 that he provides to his MCS patients.

1. Local Anaesthetic:

- a) If a local anaesthetic is required, use 3% carbocaine without epinephrine in a single-dose disposable "carpule" with no preservative.
- b) Epinephrine comes with a bisulphite preservative, which is often very disruptive to hypersensitive patients. In addition, the epinephrine itself is often degraded more slowly by an inefficient cytochrome P-450 system (detoxification enzyme system); hence, small doses give large effects to these patients.

2. Avoid eugenol or substances containing eugenol. Even in small quantities, eugenol has been devastating to many patients.

3. Avoid the use of "varnish" to coat the inside of the tooth prior to treatment.

4. Avoid protective plastic tooth coatings, as they are often not tolerated.

5. Root canals. The root canal "caulking" paste is often not tolerated by chemically sensitive patients. This paste contains cytotoxic substances such as eugenol and halogenated hydrocarbons such as chlorothymol, iodothymol, as well as resins. These substances frequently produce insidious chronic reactions. (Note: Root canal sealers and fillers made of calcium oxide or calcium hydroxide have been well tolerated by chemically sensitive patients. A product called Biocalex which is based on heavy calcium oxide, is capable of being used without the addition of any cytotoxic substances).

6. The following substances have almost always been well tolerated:

- a) "ZOP" (zinc oxyphosphoric acid) cement (be careful not to have ZOE inadvertently substituted, as ZOE contains eugenol).
- b) High gold alloys that do not contain palladium.

7. Some individuals are intolerant to composite dental materials used as a replacement for amalgam. To find out if the patient is intolerant to the plastic-containing fillings, replace one small filling and wait two weeks. (Dentists should cure the composite thoroughly, using additional time with the curing light if required. If at all possible the patient should have an inlay or onlay fabricated in a dental lab as the restoration of choice. Composites cured in the laboratory are usually done under high heat and pressure, providing complete curing of the composite). Observe for any reactions over this two-week period. If the patient has not had any adverse reactions during this two-week period, then replace a second small filling and wait another two weeks and observe for any possible reactions. This is done as a double check to make sure they can tolerate the plastic.

8. Toxic reactions to mercury vs. allergic reactions to plastic: It is common to have a toxic reaction to the mercury vapours resulting from the removal of the mercury-containing fillings. This toxic reaction takes place during the first week and over the second week gradually lessens. Do not confuse this with an allergic reaction to the plastic, which starts during the first few days and which will not lessen but will worsen over the next one to two weeks. If you determine that the patient is reacting to the plastic, dentists should remove this test plastic filling immediately. In this case, do not proceed to the second trial. Your options at this point are to use high quality gold and Z.O.P cement without eugenol, (Note: In the USA you can have a dental materials reactivity test done to determine your sensitivity to dental materials. Have your dentist contact Clifford Consulting & Research (719) 550-0008 or Fax (719) 550-0009 for details).

Nickel and silver are other metals used in amalgams; Nickel (Ni) is often found raised in Lymphocyte sensitivity tests and DNA adducts (free radicals), responsible for epigenetic changes of the DNA and

disruption of the normal cell chemistry. Exposure to Mercury (Hg) is a point those practicing dentistry are warned against (occupational hazard).

9. Additional nutritional self-help suggestions for patients before and after removal of dental mercury. Note these are general guidelines and you should seek advice from an experienced practitioner before taking these, especially selenium. Make sure you are also taking a general good quality multi-vitamin. Homeopathic remedies can also be helpful.

- a) Vitamin C is somewhat protective against foreign (xenobiotic) molecules. You should not take vitamin C during the five hours prior to your dental appointment, as it may lessen the anaesthetic effect. However, bring extra vitamin C with you and take a minimum of 500 mg after completion of your dental work and before leaving the dental office.
- b) Take chemically pure liquid selenium solution, one teaspoon daily (if tolerated), three days before and three days after each dental visit. The selenium will help protect you against unavoidable mercury exposure during the removal process. (Note: If not available at your health-food store, a liquid selenium by Allergy Research (Selenium Solution) is available from UK vitamin suppliers including www.revital.co.uk Tel. 0800 252 875.

General Information for Staff

Not everyone with MCS and EHS reacts to the same things, but it should be noted that reactions are cumulative so avoiding contact with fragrances may help patients tolerate medications. Generally staff should avoid wearing perfume, aftershave and fragrances as well as hairspray and dry-cleaned clothes or clothes worn while smoking.

Practitioners should check which products their patient can tolerate before using anything as some patients may react to cleaning products, mouthwash, toothpaste etc. Autoclaving equipment is likely to be the best option for patients sensitive to disinfectants.

Generally the first appointment of the day helps MCS patients avoid contact with fragrances from other waiting patients. Ideally appointments should be in a room that has not been recently decorated or cleaned and contains no air fresheners. Opening the window may be helpful. Patients may need to wait away from other people to avoid reacting to their fragrances.

If patients are affected by Electro-Hypersensitivity they are likely to react to very low levels of electromagnetic fields from any electrical appliance, Wi-Fi and mobile phone signals. To accommodate these patients, mobile phones should be turned to flight mode for the duration of the visit, and Wi-Fi switched off. Ensure patients do not sit or lay directly next to electrical equipment; in severe cases unplugging any unused equipment can help. Severely affected patients may need fluorescent and low-energy light bulbs turned off as they can react to these frequencies, however old style tungsten bulbs may be tolerated, and some patients find LED lights preferable.

**ATTENTION:**

This patient has **Multiple Chemical Sensitivity (MCS)** and cannot metabolize xenobiotics efficiently. This means toxins quickly accumulate in the body leading to severe reactions to medicines and Volatile Organic Compounds (VOCs).

Severe reactions occur at very low doses.

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This includes drugs, food, perfume and fragrances, cleaning products, disinfectant, dressings, new plastic, rubber and solvents. Reactions can be immediate or delayed by several hours depending on which organs and body systems are involved. Recovery will be severely impaired.

Reactions are cumulative and occur as a result of inhalation as well as contact.

Symptoms affect multiple organs and body systems including breathing difficulties, confusion, impaired balance, speech and vision, nausea, pain, palpitations, rash, sudden mood changes, fatigue, collapse, widespread generalised oedema, hypertension and anaphylaxis.

Each reaction increases the likelihood of further, more severe reactions as the patient will become progressively more sensitive.

CAUTION

- No latex
- No alcohol. No products or medicines containing alcohol should be used in the treatment room, including wipes and hand gel. If necessary rinse equipment with plain water to remove alcohol residues.
- Patients must not be treated by staff wearing perfume, hairspray, clothes washed in fabric conditioner/ dry-cleaned, or staff who smoke.
- Patients should be accommodated away from other people in a well-ventilated room that has not been recently cleaned, decorated or contains new furniture or furnishings.
- Medication should be started at ¼ standard dose and observe for symptoms. Symptoms may be delayed.
- Be aware the patient may react to electrical items. Where necessary turn off mobile phones and Wi-Fi and move the patient as far away from electrical equipment as possible.
- If the patient reacts to plastic oxygen masks use a porcelain mask or make a cardboard cone and use old, well-aired tubing.
- Medication should not contain preservatives or alcohol.
- Anaesthetics must not contain fluorocarbons, preservatives, or the letters 'THANE'. Local anaesthetics are preferable to general ones.
- Patients are susceptible to hypothermia during routine procedures.

More details of protocol for reactions and specific information for surgery is contained in the booklet '*Hospital Guidance for Patients with MCS*'.

Download from www.MCS-AWARE.org/medical.

Disclaimer: Information in this document is intended as a sharing of knowledge and information from research and experience of environmental illness. This document is not a substitute for medical, legal or other professional services; consult a competent professional for answers to your specific questions. Always consult a medical practitioner before making changes to your lifestyle or diet. This information is from our archive, where we put out of date material which still might be useful.