

Technique Tips

Minamata: What patients need to know

The previous two papers provided dentists with details of the potential impact on dentists of the Minamata Agreement. However, it is likely that patients will question why amalgam is being banned in children under 15 years and in pregnant and nursing women. Therefore, this Technique Tip presents a Patient Information Leaflet which we hope will be of value.

Throughout any discussions with patients it should be stressed that amalgam is being phased out because of environmental reasons, given that there is no evidence that there are toxicity issues for patients.¹⁻³ Reference 1 (the paper contains 170 references) provides clear evidence that amalgam does not cause kidney damage, and that it is not associated with Multiple Sclerosis, Alzheimer's Disease, or mental illness and that mercury from dental amalgam does not damage the immune

system or cause harmful reproductive effects.

References

1. Wahl ML. Amalgam – resurrection and redemption. Part 2: The medical mythology of anti-amalgam. *Quintessence Int* 2001; **32**: 696–710.
2. Bellinger DC, Tachtenberg F, Barregard L, Tavares M, Comichiari E. Neuropsychological and renal effects of dental amalgam in children. *J Am Med Assoc* 2006; **205**: 1775–1783.
3. DeRouen TA, Martin MD, Laroux BC, Townes BD, Woods JS et al. Neurobehavioural effects of dental amalgam in children. *J Am Med Assoc* 2006; **205**: 1784–1792.

Acknowledgment

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for patients 'Dental amalgam (Silver fillings) and you' which stimulated them to write this Patient Information Leaflet.

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1. A	6. C
2. C	7. C
3. C	8. B
4. C	9. B
5. B	10. D

Dental amalgam (silver fillings): What patients need to know

The Minamata Convention on mercury is a global treaty, signed by the UK and over one hundred countries in October 2013 with the intention of protecting human health and the environment from the adverse effects of mercury. The European Union approved the Convention in adopting Regulation (EU) 2017/852 of the European Parliament and of the Council on 17th May 2017. So, from 1st July 2018, amalgam fillings will be banned for children under the age of 15 years and for pregnant or nursing women (Article 10, 2). This global agreement was designed to limit the use of mercury from all sources, including LED light bulbs, fluorescent tubes, vaccines, fertilizers, thermometers, batteries. Dental amalgam fillings have been included in this agreement as, of course, dental amalgam contains mercury.

Research has shown that dental amalgam is safe to patients. It is strong and long-lasting. Dental amalgam has been used extensively in the developed world for over 125 years. The decision to restrict the use of dental amalgam in the groups of patients mentioned above is the start of the reduction in overall mercury use and, eventually, it may be phased out completely. The reduction in amalgam use is solely based on environmental grounds and there is no scientific evidence showing that it is harmful to patients. Your dentist will be able to show you the research stating this. You may ask: I have lots of amalgam fillings in my teeth – might that be harmful? The answer therefore is **NO**, and the amalgam fillings which are functioning well in your teeth do not need to be removed.

However, if and when one or more of your amalgam fillings need to be replaced, you may wish to have a discussion with your dentist regarding whether to have another amalgam filling, or a new tooth-coloured *resin composite* filling placed instead. There is increasing research which shows that these are long-lasting and, of course, they look better: the downside is that they take longer to place, so will be more expensive. More research is required in order to make these tooth-coloured fillings as fast and easy for your dentist to place as amalgam fillings. However, in certain clinical situations, dental amalgam may still be the filling material of choice.

Lastly, if you are pregnant, your dentist will try to postpone filling teeth, whenever possible. You should, however, rest assured that all dentists are legally obliged to work in the best interests of all of their patients and ensure that treatments are not harmful to you in any way.

