



“Silver” Amalgam Fillings and Your Health

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If you have had to visit the dentist on account of tooth decay it is highly likely that an amalgam (“silver”) filling was used to restore the tooth to health. Dental amalgam has been a popular, effective and inexpensive material used by dentists for over 150 years, but recently it has attracted growing publicity over possible adverse effects on health. Is there really any cause for worry?

What is in an amalgam filling?

This is often referred to as a “silver” filling and is made by combining mercury with particles of silver and tin mixed with smaller amounts of copper and zinc to improve performance.

Why is it used so extensively?

Dentists have a range of sophisticated filling materials available, each with their relative merits. An ideal one should be easy to use, inexpensive, tooth coloured, without any adverse side effects and long lasting. The ideal filling material with all these properties has yet to be developed.

Dental amalgam is relatively inexpensive, easy to use and long lasting. Indeed it is generally considered to be the material of choice in many common situations where appearance is not a concern and the teeth are likely to sustain a great deal of wear and tear, for example in the back molar teeth. Chemical changes in the silver amalgam take place over a period of time that help to seal the filling at the edges. These changes contribute to the fact that amalgam has been such a successful filling material. Other filling materials such as “white fillings” made of ceramic or composite resin, are more expensive and do not seal in the same way. Leakage and durability can be more of a concern with some of these materials.

Isn't it poisonous?

Mercury, copper, tin, – are they poisonous? How can they be safe in my mouth?

Although the individual components may be toxic in high enough amounts, they combine to form a stable material that has some excellent properties. An analogy with salt is often used; both sodium and chlorine are harmful elements in their natural state, but when combined they form ordinary table salt which is an essential part of daily life.

If you are familiar with the Internet and search for information on amalgam you will find a great many claims linking it with all manner of ailments and diseases including allergies, neuralgia, dementia and cancer. There is no scientific evidence to support such claims.

Mercury is released from fillings in tiny amounts, sometimes during eating or brushing your teeth. However there is no evidence to indicate that the amounts released are harmful; if there was the Department of Health would advise dentists immediately. It is of course impossible to state that any material is completely safe in any situation and dentists are guided by current scientific evidence.

What are other common sources of mercury?

Amalgam fillings are not the only daily source of exposure to mercury; others include food, the environment and

occupational exposure. Some foods such as fish in particular have a high mercury content; Icelanders are exposed to approximately ten times the level compared to residents of the UK because of the amount of fish they consume.

Dentists & mercury

“He’s as mad as a hatter” was a term used to describe hat makers who used mercury as part of their trade. The consequent effect of exposure to mercury upon their behaviour is the source of this popular saying. Since mercury is a toxic substance in large enough doses, dentists and their staff must take particular precautions when handling and disposing of amalgam in order to protect the well being of their patients, staff and themselves. Long gone are the days when amalgam used to be mixed in a mortar and pestle!

A recent study carried out in Scotland has indicated that dentists themselves may need to be more concerned about long-term occupational exposure to mercury in the dental environment rather than about the levels of mercury to which their patients are exposed by their fillings.

Is amalgam suitable for everyone?

People with known allergies to amalgam will require an alternative filling material, although such cases are extremely rare. In these exceptional circumstances the offending filling should be replaced with an alternative such as gold.

As with all other operative procedures dentists will wish to minimise any intervention during pregnancy unless it is absolutely necessary. This will include the removal and placement of amalgam fillings.

Children have different requirements to adults, and small cavities can often be treated with tooth-coloured alternatives especially if a cavity is in a milk tooth that is due to be shed within a fairly short period of time. However when a cavity is large and the restoration must be long lasting, amalgam is often the material of choice.

Should amalgam fillings be removed and replaced with an alternative?

Except under specific circumstances, for example where there is a known allergy to amalgam, the removal and replacement of this type of filling simply on the basis of a possible health risk is not recommended.

Talk to your dentist!

A variety of factors are important when deciding upon the type of filling most appropriate for restoring a tooth. These will include the size of the filling, its location, cosmetic concerns and of course cost. Your dentist will be only too pleased to discuss these with you so you can make an informed decision. Amalgam is a valuable filling material and it may well be that it is still the best option for you.

For further dental information go to www.dental365.com

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