

## Swedish pharmacies ban silver band- aids

On April the 20<sup>th</sup> April Swedish pharmacies (Apoteket AB) decided to stop selling band- aids containing silver. The decision was influenced by an article in *Miljöaktuellt* nr 3, April 2006.

This certainly proves that committed people and information can make a difference to Health Care.

Below follow the article in *Miljöaktuellt*, translated into English.



Silver bandages increase risk of resistant bacteria

METALS. The use of silver as a bacteria killer has increased tremendously in health care. It is often dubious if patients really get any better because of the added silver and at the same time the metal is harmful to our environment.

When *Miljöaktuellt* asked staff at some pharmacies in Stockholm, Sweden about the advantages of the new silver Band-aids the answers were somewhat inconsistent. Well, it is anti bacterial, but probably it is mostly about marketing. That silver is a heavy argument in marketing is a fact for people working in health care.

- We have even had suggestions from companies to impregnate our hospital wearing-apparel with silver which means to add silver ions to the rinsing water at our laundries, says Leif Olofsson at the Environmental secretariat at the Region of West Gotaland, in south west Sweden.

The environmental report from the region shows that the amount of silver used in bandages increased with 67% from 2004 to 2005. Silver is also used in catheters and prostheses. The widespread use of silver worries Åsa Melhus, MD and senior consultant at Uppsala University Hospital in Uppsala, Sweden.

- Silver is now increasingly used in health care and mostly without any extensive scientific evidence. Silver is poisonous and should be used with care and sensibility.

Sometimes the silver use does increase the possibilities for patients to get better, for instance as in the treatment of burns, but in other cases it may in fact be harmful.

An American surgeon talked about cases where the patient's skin had actually died after the use of silver bandages, Åsa Melhus tells us.

One of the arguments for using silver is that it is an alternative to antibiotics and therefore decreases the risk for antibiotic resistance. But this good effect is very doubtful.

There is according to Åsa Melhus a risk that bacteria become resistant to heavy metals and perhaps at the same time to antibiotics since, at least partly, the same underlying mechanisms may be behind it. If silver leaks into the environment it is of course poisonous to bacteria there as well. Too high levels of silver in the sludge from the cleaning plants may prevent it from being used on the fields as fertilizers. The cleaning plants have worked on getting the levels down and the discharge has earlier gone down because of the transfer from traditional cameras to digital cameras.

The Swedish Chemicals Inspectorate has noticed the increase of silver usage in health care and plan to hold a meeting with representatives from authorities and the health care sector in June. But already now in April a meeting will be held in Uppsala with representatives from the health care sector from all over Sweden where the use of silver in health care is to be discussed; when it is motivated, when it is harmful and when it is really not needed at all. The band-aids sold in the pharmacies fall into that last category.

- Ordinary simple hygiene is sufficient. It is generally best to wash with soap and water.

There is also an additional risk of people flushing the band-aids down the toilet so that the silver enters the cleaning plants.

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But I wear silver in my ears. Silver is very poisonous for bacteria. Microorganisms in the soil are choked already at quite low concentrations. In the soil silver may appear as ions or in

different compounds as silver sulphide. The metallic silver we wear as jewelry is also a bacteria killer. But not much leaks out into the environment from a piece of jewelry.

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Article from *Miljöaktuellt* Nr 3, April 2006 by Anna Sandquist from the Swedish Environmental Protection Agency.

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