Readers Letters

Don't fear the fever

- 25 August 2010 by Heinz-Uwe Hobohm, University of Applied Sciences Giessen-Friedberg, Giessen, Germany
- Magazine issue 2775.

I was interested in your discussion of the effects of fever (31 July, p 42). In 1996, while working in Germany on a cancer project at the University of Bremen, I stumbled on a 1951 paper by Louis Diamond and Leonard Lubby on spontaneous remission in childhood leukaemia (Journal of American Medicine, vol 10, p 238). They noted that a feverish infection preceded remission in 21 out of 26 children they studied.

I remember jumping up from my chair thinking this cannot be happenstance. I investigated many publications on spontaneous regression from cancer. Many, if not a majority, of cases were preceded by a feverish infection - see my 2005 paper in the British Journal of Cancer (vol 92, p 421).

Today we know that bacterial and viral chemicals such as lipopolysaccharides, which are strong inducers of fever, are needed to activate innate immune system - the body’s initial immune response which defends against pathogens in a general way without conferring immunity - and that this activation is needed to trigger a full-blown T-cell response against cancer cells.

Yet whenever I present these findings in medical circles, the reaction is blunt mistrust. For example, at a recent conference on innate immunity I listened to a talk that revealed that many more patients survive sepsis, a whole-body inflammatory response, if they develop fever. I asked whether it might be worth considering inducing fever in high-risk patients. I received a brief response: "No".

No profit in fever

- 01 September 2010 by William Hughes-Games, Waipara, New Zealand
- Magazine issue 2776.

Your article on the role of fever in fighting infection (31 July, p 42) missed one of the most interesting chapters in this saga: in the late 1800s and early 1900s a doctor called William Coley attempted to cure cancer with fever, with some success. An earlier article in New Scientist (2 November 2002, p 54) described his work.

The trouble with using fever as a cancer cure is that it would not be patentable. It would be a repeat of the malaria-wormwood story: progress in the widespread use of artemisinin - the anti-malaria agent derived from wormwood - was stymied for many years by the lack of obvious profitability.

Sweat it out

- 08 September 2010 by Adrian Jones, Edmonton, Alberta, Canada
- Magazine issue 2777.

Your article on the benefits of not treating fever prompted a déjà vu moment for me (31 July, p 42). In 1972, a small group of chairs of US academic paediatric departments - and me, a youngster from Canada - took part in a three-day workshop entitled "Management of fever" at the Centers for Disease Control in Atlanta, Georgia.

It was decided that treatment for fever should not be implemented before a patient's temperature reached 104 °F (40 °C). This was subsequently presented at my medical school, but with little effect. About a decade later, the paediatric residents also presented similar data to show that treatment below that level was rarely necessary, again to little effect. The chief obstacles were nurses and older physicians, who wanted to feel that they were providing treatment. At least we managed to get rid of the alcohol baths, cold baths and cold compresses.

As a retired paediatric gastroenterologist, I have seen a number of children treated repetitively with acetaminophen (paracetamol) but with inadequate fluid intake, who developed hepatic toxicity, and one liver transplant patient who eventually required a second new liver after acetaminophen management of a spiking fever.

I agree with your article wholeheartedly. Antipyretics like acetaminophen or ibuprofen may be used with discretion for evident discomfort, but fever has therapeutic effects in the body, and getting rid of it only requires the body to use a considerable amount of energy to push the temperature back up when the drug wears off.

Some hospital burns units raise the room temperature to about 28 °C to help burns patients, who maintain a normal body temp of about 38 °C while in the early stages of healing. Now that's forward thinking.

From George Mills

- Magazine issue 2777.

The Zulus in South Africa were known, at the first sign of malarial fever, to cover themselves with blankets and skins and lie in the sun for a whole day, to raise their body temperature as high as possible. The claimed result was a full cure by the following day.

This type of treatment was recorded by writers like Henry Rider Haggard in his book King Solomon's Mines. Having no idea they were recording unique medical practice, such authors simply threw in these observations as interesting background information to give an exotic flavour to the story.

Early missionary doctors like David Livingstone introduced western medicine and put a stop to these alternative treatments, which might yet be resurrected.

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Hotting things up
Further to your article about the idea that fever may help the body fight disease (31 July, p 42), sweating out a cold was common practice at my military boarding school in the early 1960s.

Life there was harsh enough without the misery of illness, which usually induced some form of inattentiveness that in turn resulted in a disciplinary charge. So the onset of a cold meant borrowing as many army greatcoats as possible and piling them onto the sick person's bed at night to try to bring about a cure.

It seemed to work, too, though the fact that we were young and fit may have played a part. Even today I double up the bed covers if feeling feverish, though still wonder if it is a case of feeling better because you think you are better.

From John Morton

Does George Mills seriously think, as his letter appears to suggest (11 September, p 30), that malaria can be cured just by wrapping the sufferer in blankets and sitting them in the sun, as he says the Zulus used to do? The World Health Organization reports that there are over 200 million cases of malaria a year, and nearly a million people die of it each year. Most of them are children in Africa. If Mills and presumably the Zulus know how to cure malaria in 24 hours, why on earth don't they tell everyone?

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