

## The Benefit of Fever

Symptoms of the generalised inflammatory response are therefore part of a sophisticated and coordinated whole body response that results in symptoms of fever, malaise, tiredness and generalised raised white blood cell count. There is therefore **no** mal-function and once again the symptoms themselves are not the problem but the reaction to the problem.

Reduce the fever – using aspirin, for instance - and the disease may last longer as Timothy Doran of John Hopkins University, Baltimore has demonstrated in the case of chickenpox, published in *Journal of Paediatrics* 114:1045-8 (1989).

The fear that the fever may rise uncontrollably and lead to febrile convulsions is often cited as the justification for the use of fever suppressants (anti-pyretics) and anti-inflammatories. A febrile convulsion can happen when a patient, often a child, has a high fever and they become almost comatose, limp and apparently lifeless with initial and occasional twitching. The term convulsion can give the impression that the symptoms are mainly convulsive, spasmodic and epileptic in nature; however a febrile convulsion is not a neurological fit, the main state is one of limpness and lifelessness. Here the body has in fact diverted almost all its resources to raising a fever, dealing with the diseased tissue and toxicity. Once again, even in the case of a febrile convulsion, the symptoms are in fact part of a coordinated response to the trauma.

The fear is that the fever will destroy cellular components of the body and the febrile convulsion will lead to permanent neurological damage. However studies do in fact show the opposite, that fevers and febrile convulsions cause no damage. So the use of this rationale to sell drugs must have either originated in belief from fear or simply used as pharmaceutical sales leverage.

When the body produces a fever the temperature regulation is **not** out of control, but the thermostat has simply been set to a higher level to deal with the trauma. In fact there are internal mechanisms within the body to stop the fever running above a certain temperature. From standard medical texts there has been no evidence of cellular damage caused by fever, and in fact it seems hard to believe that the body would simply cook itself. The sporadic very high rises in temperature (spiking) that occur whilst a patient develops a fever, would be more likely to occur if they are taking fever suppressants, because as the drug is naturally metabolised by the body and therefore wears off, the fever spikes to higher than natural levels as the body counteracts the original suppression.

Rather than the fever causing long-term neurological damage, it is the internal toxins and concomitant microbes, if not eliminated, that will damage the internal systems including the nervous system. Therefore suppressing the fever to avoid neurological damage is actually doing the exact opposite, pre-disposing the patient to invasive toxicity and the very symptoms that one is trying to avoid.

The term '**Fever Phobia**' was used by Barton Schmitt, MD, back in 1980 to describe the numerous misconceptions that many parents and health professionals (including doctors) had, about fever. Twenty years later as reported in the journal 'Paediatrics' a similar study demonstrated that fever phobia still exists and recommends further studies to evaluate how to re-educate the public and health professionals.

An alternative view one might think...the following comment from Wouter H Havinga, General practitioner appeared in the British Medical Journal 314. 7<sup>th</sup> June 1997 page 1692:

*"... The common understanding of the general public seems to be that when fever gets too high it can cause death. In hospitals this seems to be confirmed, because paracetamol is given whenever a patient has a fever. I have not, however, seen a publication to support this. This misunderstanding has major implications for general practice. A paper by Kai illustrates this.*

*Current understanding is that people die of the underlying illness, not of fever. To support the benefit of fever one can start with the evolutionary argument. If fever were not of value for survival it would not be part of our defence.*

*Research has shown that many immune responses are enhanced by an increase in temperature. Routine antipyretic treatment for fever is generally unnecessary and conceivably harmful. It has been suggested that it may prolong illness and increase or prolong viral shedding.*

*Parents do not need to worry about febrile convulsions, because when they telephone for advice the fever is already established and the episode of a rapid rise in temperature will have passed. Febrile convulsions, understandably, distress parents, but parents can be reassured that convulsions will not cause a disability. Also, the outcome is determined more by the underlying cause than by the seizures themselves.*

*In conclusion, and in line with the views of Styrt and Sugerman, I would like to see routine antipyretic treatment reassessed and adjusted, depending on whether desired objectives such as, reduction of cardiovascular stress and increase in comfort are being achieved.*

***I think that paracetamol should be taken off the market....** If this were done to coincide with a national campaign explaining the benefits of fever then it would have a major educational effect on the general public. Consequently, this would reduce the number of consultations and would probably enhance the health of the nation.*

The role of fever as adaptive and immune enhancing appears to be acknowledged in conventional medical circles, it has also been found that death rates increase in patients who are less able to produce a sufficiently high fever in response to infections (American Journal of Medicine. 68:344-355, 1980). The extensive use of

anti-pyretics would therefore appear to be as a result of very effective pharmaceutical sales, as opposed to clinical evidence.

Going back to our example of toxic build up within the digestive tract; this would give rise to a local inflammation (e.g. a gastritis), leading to a generalised inflammatory response with fever; if the body has been successful in eliminating toxins and redressing microbial imbalances, then recovery takes place and normal functioning resumes. However, from an orthodox pharmaceutical perspective if we perceive the inflammation as being the problem itself we are apt to treat the body by giving **anti-inflammatory** medication and therefore make it more difficult for the body to deal with the underlying cause, and if unsuccessful in our attempts to deal with those causes using inflammatory reactions, we find our pathology takes on a significantly new dimension.