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Arsenic And New Research Findings

Arsenic is not only tasteless, it has no smell. Because of these two factors its presence in the drinking water went unnoticed for an inordinately long time. In fact it was not noticed even when people began falling sick as nobody knew about arsenic and arsenical skin lesions caused by arsenic toxicity. Today we are not much further down the road to understanding as, though millions of people are consuming arsenic contaminated water, few relate the skin problems to the water.

Because of our lack of knowledge, many people have already reached the stage where internal damage to liver, kidney, lung, bladder, pancreas or spleen — and, in some cases, the digestive tract, has taken place.

In fact our ignorance can only be considered remarkable as it is now many years since the arsenic in the drinking water was discovered. The only mitigating factor to this situation is that as these cancers are invisible to the naked eye, they are often missed or diagnosed too late. In other words people could be dying even now without any outer sign that anything was wrong. What a situation for a nation to encounter! But worse is to come as a new research reveals that high levels of arsenic in the drinking water are now thought to cause bladder tumours to be more aggressive.

Findings on a recent study of bladder cancer patients in Argentina and Chile showed those whose drinking water contained high levels of arsenic tended to have more chromosome abnormalities in their tumours. Published in the 20 November issue of the Journal of the National Cancer Institute, the report says these genetic alterations were also associated with later-stage and more-quickly growing tumours. This suggested that bladder tumours in people with high arsenic exposure "may behave more aggressively" than those of patients with lower exposure, reported Dr. Lee E. Moore, of the National Cancer Institute in Bethesda, MD, and her colleagues.

Reuters also reported that, in the current study, Moore's team examined tumour samples from 123 patients who had been exposed to arsenic in their drinking water and found that the average number of chromosome abnormalities per tumour went up in tandem with patients' arsenic exposure. For those in the two lower-exposure groups, there were five to six alterations per tumor, on average. Patients with the highest arsenic exposure showed nine chromosome alterations per tumor, on average. This all goes to prove that our concern for our people's health was justified but keeping the people healthy is a big responsibility no-one wishes to take up but unless they are healthy, people cannot contribute to a nation's development.

If, as we are told, arsenic contamination in some districts is increasing, we can expect more cases of cancer to appear, but what if we miss those too? What help will the victims get? Probably none as already the health services are being swamped with arsenic patients as a result of ignoring the problem. Many have already developed the liver, lung, kidney or bladder cancer we fear.

The knowledge that chronic exposure to arsenic leads to a number of illnesses, including skin lesions, neurological problems, diabetes and both skin and internal cancers, gives us little comfort if we cannot do anything to prevent it. The one consolation is, as more and more information on arsenic-contamination and poisoning come in, we can gain a better understanding of what we are up against but only if we can put this new understanding to use, can we fight this menace.