Occupational carcinogens are a large problem in the developing countries like Nepal, where much of the industrial activity takes place in small work setting. Old machinery, unsafe building and employees with limited occupational hazard knowledge often characterize such small industries. Personal protective equipments like gloves, respirators and overalls are seldom available or used. Epidemiological studies done in other developing countries strongly indicate that there are many occupations and industries in Nepal with possible exposure to carcinogens. The government bodies do not have full information about the type of occupational carcinogens present in the industries in Nepal. It is highly recommended to keep detailed information about the occupational carcinogens present in the work settings and workers should be fully aware of them. Whenever possible, those carcinogens should be replaced by less hazardous substances. The workers should be encouraged to use different personal protective equipment. Prevention from exposure to carcinogens at workplace is the only possible intervention against occupational cancer.

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REFERENCES


KAtex TEST AND KALAZAR

Dear Editor,

The article about Katex Test for the detection of urinary antigens in visceral leismaniasis patients is useful to a country like Nepal where Kalazar is endemic. However I would like to suggest a few things about this article.

The authors had mentioned the disease peaks during May to August but the study itself was conducted from September 2000 to May 2002. There must have been some genuine problems for the timing of the study. It would have certainly helped to have a large sample size for a disease that can cause as many as 1,00,000 deaths every year world wide.

The number of healthy individuals for the control samples was also relatively less as the disease can also have subclinical infection and it would have also helped to establish a base line titre in healthy population if any. The authors also did not mention whether any of the healthy controls had KAtex test (latex agglutination test) positive or not. The incubation period is usually one or two months but may be up to ten years and this will also have to be considered.

As the urine has to be stored at 4°C, and the disease is found in warmer climates of the country, the supply and distribution of KAtex testing materials should be extensive so that proper testing methods can be done in patients bed ridden with severe illness and in places where there is no electricity.

The criteria of fever for more than 2 weeks and a palpable splenomegaly did not include screening for enteric fever which is also quite common in Nepal.

The authors also did not mention the total number of bone marrow biopsies performed but a study where bone marrow studies was used as the gold standard, having a bone marrow...
analysis in each patient would have certainly helped to establish the actual sensitivity and specificity of the KAtex. A large sample of bone marrow analysis might have revealed some false negative KAtex test results.

It is already established that splenic aspiration have a higher yield (98%) over bone marrow studies for the LD bodies. In cases of the study in which visceral leishmaniasis (VL) was suspected and BM was negative, but KA tex test positive, a splenic aspiration would have helped to rule out the possibility of false positive of KAtex tests. The authors have not also mentioned in how many cases of suspected VL had negative microscopy in bone marrow test but KAtex positive. It is not also clear whether the authors pursued for the final diagnosis of all suspected cases of VL in which all the tests for Leishmaniasis were negative as this might have further helped to refine the eligibility criteria to be included in the study.

In Mahottari (also in other districts) there was – 88 suspected cases of VL and only 7 were found to be positive for KAtex test. This raises serious doubts about the sensitivity of KAtex in general which might cause problems if it is to be used as a screening test in the field.

Further research will also be required to rule out chances of having false positive KA tex test results in patients suffering from isolated malaria or tuberculosis. The problem with serological testing for the diagnosis of VL is the specificity, as some of the leismanial antigens cross-react with antigens of other organisms such as Trypanosoma, Mycobacterium, Plasmodium etc. It would have been helpful to know clearly whether the authors had tissue confirmation for VL for every case in which both were positive eg. serology for malaria and KAtex.

As the authors have correctly suggested, further clinical evaluation of KAtex is also required to see when the test will become negative after treatment. This will also help to shed some light about the test in patients who have suffered from Kalazar in the past both clinically and sub clinically and whether the test will be still be positive or not.

As the VL is much more common in HIV population, an HIV screening tests in the study would also have shown the prevalence of VL in HIV population in Nepal, as compared to Southern Europe. Leishmaniasis antibodies may also not be detectable in persons coinfected with HIV. So KAtex test may have a crucial advantage over DAT (direct agglutination test, K39) in detecting VL in such patients.

The final question will be whether just clinical suspicion and a positive KA tex will be sufficient and justified to start Anti-Kalazar therapy or whether it will still require to rule out other diseases like malaria, TB, enteric fever and bringing back the increase in costs and complexity of the lab investigations.

The study conducted by the authors is certainly a big step in the right direction and has immense implications for a developing country like Nepal. However, further studies will be required to establish the role of Katex in the diagnosis of kalazar.

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REFERENCE

AWARENESS ABOUT LEPROSY

Dear Editor,

I read with interest, the original article about the community awareness about Leprosy. I congratulate the authors and all the people involved in the study, which is one of the few studies done in Nepal regarding the same. Recently I also came across similar studies like “Report on the baseline survey of the LEC”, “A report on the impact survey of the LEC in Nepal” and “Report on the LEC IEC materials”.

The study, based on structured questionnaires, has brought into light good information about community awareness about leprosy in Sunsari district, which is one of the highly endemic areas of our country. The results probably reflect similar