

Virtues of Vaccination

The deadly hepatitis-B infection, which is the most common cause of liver cancer and cirrhosis in India, can be kept at an arm's length if newborns are vaccinated on time, says **PRERNA K. MISHRA**

Photographs by Harish Tyagi

FOR most of us, hepatitis does not ring any alarm bells, despite the fact that this disease has the potential of becoming as explosive as HIV. While most health-related agencies like to brush aside hepatitis as a non-issue, data forces you to believe otherwise. In India, while nearly 30 lakh people have been tested as HIV-infected, nearly 3.5 per cent of the population is reported to be Hepatitis B positive and 1.5 per cent Hepatitis C positive. In other words, India has more than 450 lakh carriers of the B and C strains of hepatitis alone.

The threat, however, lies in the fact that each one of these carriers can infect countless other people without showing any symptoms or illness themselves. Like HIV, hepatitis is transmitted through blood and sexual contact. The hepatitis B and C viruses harm the liver the most and are responsible for a chunk of the cases of cancer of the liver and cirrhosis reported our country.

Treatment apart, the only cost-effective method of controlling Hepatitis B would be to break the cycle of the virus. "Hepatitis B can be nipped in the bud, as it is the only strain that can be transmitted from the mother to the child," says A. K. Patwari, Professor of Paediatrics and Chief, Division of Paediatric Gastroenterology and Nutrition, Lady Hardinge Medical College.

According to S. K. Mittal, Professor and Head of Pediatrics, Maulana Azad Medical College

and Lok Nayak Hospital, "The contribution of perinatal (from mother to child) transmission of hepatitis is very significant in India. Nearly one-third of the overall pool of chronic carriers are get infected this way."

Interestingly, in a sample testing conducted on 1,000 women, nearly 4.3 per cent of the mothers tested at the time of delivery are hepatitis positive.

Out of this, 0.7 per cent were tested positive for Hepatitis Be antigen, which means there are 90 per cent chances of these mothers transmitting their diseases to the child. Also, of the 250 lakh births that take place in India every year, 3 lakh babies are likely to become chronic carriers. Hepatitis can be prevented either by vaccinating children or by preventing infection in expectant mothers.

It is necessary for people handling blood products in hospitals and nursing homes to take extra precaution. "You just need as little as .00001 ml of blood to get



■ Rakesh K. Tandon, Head of Gastroenterology, AIIMS, feels that India needs to take the mass immunisation route to contain hepatitis-B transmission (above); Anupam Sibal, Consultant Paediatric Hepatologist, Indraprastha Apollo Hospital, says that earlier you immunise your child, the better it is



infected. What's more, most people are also not aware of the fact that Hepatitis B is more infectious than HIV," says Anupam Sibal, Consultant Paediatric Gastroenterologist and Hepatologist, Indraprastha Apollo Hospital.

Says Rakesh K. Tandon, Head of Gastroenterology, All India Institute of Medical Sciences, "As

A Virus At Large

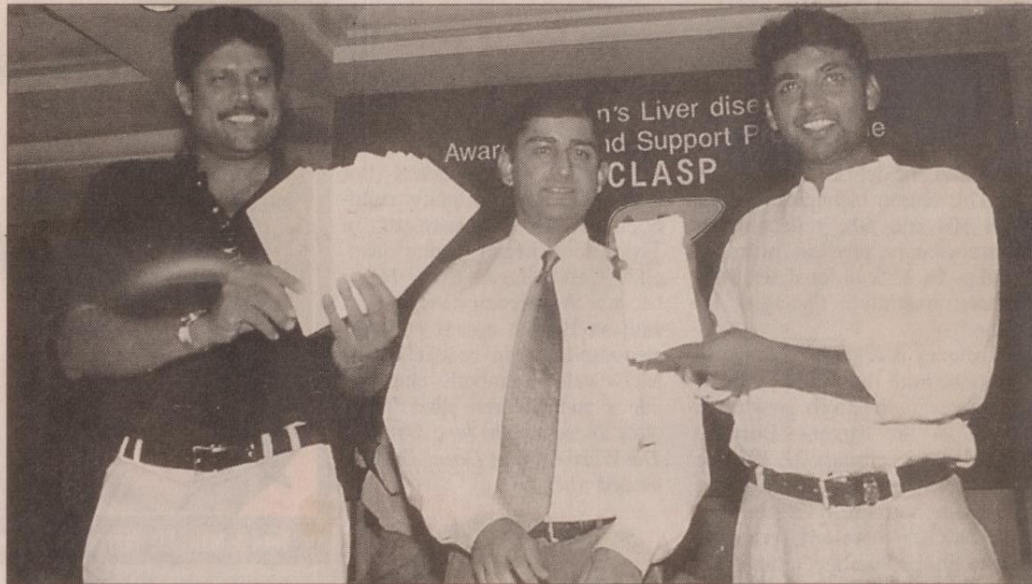
With every 20th Indian suffering from Hepatitis B and one third of that infected populace dying as a consequence of liver cancer, one would presume that a prevention policy against the hepatitis virus would be on the national agenda *aka* the polio drive. However, with the total cost of the immunisation of every new born Indian baby coming to around Rs 190 crores, the country seems to pay a 'cheaper' price with a cost effective strategy of doing nothing at all against the hepatitis virus.

According to Dr Anupam Sibal, consultant paediatric, gastroenterologist and hepatologist at Apollo and the director of the Children's Liver Disease and Awareness and Support Programme (CLASP), hepatitis is 100 times more infectious than AIDS, with over 2 million people worldwide succumbing to the infection. In fact, "hepatitis is a time bomb just waiting to explode," warns Dr Sibal.

Fortunately, concern about the deadly disease is being voiced by doctors and media celebrities who have understood the need to raise the necessary 'attention-drawing' hue and cry. So, at a recent function organised by CLASP to release a booklet on the ABC of viral hepatitis and launch a campaign for hepatitis awareness, Kapil Dev was present at the occasion and reiterated that, "we need to join hands to help the next generation."

CLASP data reveals that a concerted policy against hepatitis is possible and definitely required. Take the case of Taiwan which in the mid eighties launched a campaign to eradicate the hepatitis virus from the country. According to Dr Sibal, in another 20 odd years Taiwan will be free of the virus. The polio drive has shown that Indians are capable of organising themselves against a virus and thus equally capable of saving 2 lakh Indian babies from being hepatitis infected annually. While the nation is yet to implement a national immunisation pro-

Hepatitis is a deadly virus, a silent killer, with over 2 million people worldwide succumbing to it. But sadly in India, the government hasn't woken up to the gravity of the problem



Kapil Dev (left) and Ajay Jadeja show up to extend support to Anupam Sibal's CLASP programme

PHOTO: H.C.TIWARI

THIS VIRUS IS DEADLY

HEPATITIS A

One of the most common types, Hepatitis A proliferates in the absence of hygiene and proper sanitation. Which means that the disease is prevalent in developed or developing countries. According to CLASP data 1.4 million cases are reported annually, while the actual figures could be 10 times more horrifying.

Causes: Since the virus is excreted in the faeces, direct contact with an infected person's faeces or consequent contamination of food, water, hands cooking vessels may welcome the virus.

Symptoms: The general hepatitis symptoms reign supreme. Some infants may suffer from severe diarrhoea, nausea, vomiting and health problems. Paradoxically, you won't be better off by not having had Hepatitis A in childhood and suffering from it in adulthood: the severity of the symptoms and age grow in direct proportion!

Prevention: Adopting the usual and sensible practices of drinking clean water and steering clear of tempting but unhygienically prepared food. A single dose vaccine will keep the virus at bay for a year and a booster after 6 months will see you through for at least two decades.

Treatment: Take recourse in nutritional supplements and

THE WORST OF THE LOT

HEPATITIS B

While parallels can be drawn between hepatitis A and E, an introduction of Hepatitis B is made simpler if you know what the AIDS virus is all about as the Hepatitis B is a quieter sibling of AIDS!

How the B virus is transmitted:

Highly stable, the Hepatitis B virus resides in a host for 15 or more years without showing any symptoms and needs very little contact to be transmitted. Blood transfusion, unsafe sex, use of instruments contaminated with the blood of a "carrier" and transmission from mother to child at the time of birth are the ways the Hepatitis B virus travels from one person to another.

Symptoms:

In a majority of children and adults there may be no forewarning symptoms. However, in some, the loss of appetite, fatigue, chills, mild fever, body ache and later on jaundice (yellowness of skin and eyes), pale faeces and dark urine may be the give-aways. To detect the infection a simple blood test called the Australia antigen test is carried out.

Results in: Chronic liver disease, cirrhosis and liver failure. 80 per cent of liver cancers are a consequence of Hepatitis B infection.

Prevention: Safeguard your family against the virus. Vaccinations which are strongly recommended by the Indian Academy of Paediatrics should be administered. Three injections have to be taken, the first two with an interval of a month between either and the third, six months later. In the case of infants if the first dose is given at birth then vertical transmission (mother to baby) can be prevented.

HEPATITIS C

In India about 20 million people carry this blood borne virus, 80 per cent of whom become chronic carriers.

Symptoms: Like those of Hepatitis B, its symptoms may lie low initially.

Results in: Liver cirrhosis and even cancer in several cases.

Treatment: At present there is no vaccine available and may not be available so in the near future either: Hepatitis C infection does not lead to immunity.

HEPATITIS D

This is the smallest known virus which although transmitted through blood needs to piggy-back on the Hepatitis B virus in order to make an appearance.

Symptoms: The general hepatitis ones... but more severe

Treatment: No vaccine for itself. Taking care against type B would be wise.

HEPATITIS E

The reason for breaking the alphabetical virus order is that this type of hepatitis is a closer (albeit nastier) sibling of Hepatitis A. Transmitted through food and water, the clinical manifestations, similar to those of type E, are more severe. This virus too has no vaccine available.

ry for screening of blood by blood banks to detect Hepatitis C, the viruses continue to spread much in the manner of AIDS, however in this case, with very little opposition.

CLASP, in its campaign to create awareness about viral hepatitis, will reach out to the high school students through lectures, slide shows and booklets treating each student as a social worker who would, in turn, spread the information among family and friends. For more information, write to CLASP, c/o Apollo Hospital, 484, Connaught Place, New Delhi. E-mail to: clasp@apollohospital.com