Newer Vaccines - To Vaccinate or Not to Vaccinate is the Question: Ethical and Medicolegal Issues

Vaccination against Polio, Diphtheria, Tetanus, Whooping cough, Measles and Tuberculosis are compulsory as part of the National Expanded Immunization Programme. These vaccine are provided free of cost to the patient by the Government. Besides these, there are other newer vaccines against a host of other illnesses. These are costly and of less defined benefits. They are being promoted vigorously by the pharmaceutical companies that manufacture them and profit from their sales. The publicity given to these newer vaccines has resulted in patients demanding these injections. Doctors have by and large obliged. To accommodate all these vaccines home brewed immunization protocols are resorted to and some of these are attended by unacceptable risks. The Indian Academy of Pediatrics is the professional body to guide the Government on issues related to child health. It is thus in a good position to recommend a well studied immunization schedule for implementation by the Government. However, by publishing its own schedule which is at variance with the Government's policy it has added to the confusion and encouraged adhoc individual improvisions of the immunization schedule.

It is seen that some children are immunized with measles vaccine prior to 9 months—a few as early as 6 months of age. Such vaccination is usually useless as it is neutralised by the babies passive immunity at that age. The more compelling fear is that vaccination with measles prior to the development of immunocompetence may lead to the perpetuation of the virus in the child and result in subacute sclerosing panencephalitis (SSPE) a degenerative disease of the brain.

Hepatitis B vaccination is another case in point. It is known that infection acquired from a carrier mother can result in the baby developing chronic liver disease and liver cancer in adulthood. It is, therefore, recommended that the vaccine be given to children of mothers who are Hepatitis B carriers. This risk is much lower if the child acquires the infection after the age of 2 years. Vaccination of children whose mothers are not carriers is thus difficult to justify. Selective vaccination after mandatory testing of Hepatitis B carrier state in pregnancy is more cost effective than universal immunization with Hepatitis B.

However, doctors now recommend Hepatitis B immunization to all those who can afford it, who are also those whose mothers who are Hepatitis B screened and so need it least. There is a small risk of re-action to the yeast of the vaccine. In the absence of risk of vertically transmitted Hepatitis B this risk of anaphylaxis is un-acceptable. As this vaccine is not part of the standard national immunization if a child develops fatal anaphylaxis the doctor who advises it will find little support in a court of law.

Vaccination against *H. influenzae* b is now available. In the West it is routine practice to give this vaccine but in India its need has not been defined and so it is not recommended by the state. In all this it would be better to err on the side of caution and use only vaccines mandated by the state.

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