## Letters to the Editor

# OPV may be Discontinued but for a Different Reason

In 1988 during the 41st World Health Assembly a resolution known as WHA 41.28 was passed which directed WHO for polio eradication by the year 2000, by exclusive use of oral polio vaccine (OPV). Polio was not eradicated in 2000, any suggestions to review or re-evaluate the strategy were not acceptable(1), even the complementary use of IPV(2) or stoppage of OPV(3).

The global agencies for polio eradication are having second thought on continuation of OPV. These agencies are now seriously considering stoppage of OPV(4). This change in strategy is not because current OPV has caused high incidence of VAPP and failed to protect many children in developing countries. If current trivatent oral polio vaccine (tOPV) or monovalent oral polio vaccine (mOPV) are continued to be administered in the developing countries, there is a potential risk that circulating mutant vaccine derived polioviruses (cVDPV) may reach polio free countries and cause polio there.

WHO consultation group concluded that the continued occurrence of 250-500 VAPP cases each year, along with infrequent cases of VDPV, would be unacceptable for most, if not all countries, and that the scientific evidence points to the need for eventual, simultaneous OPV cessation, thus ensuring that no country is at risk of importing VDPV from a country that continues the use of OPV(6). But, wild poliovirus circulation will not stop in near

future. So some other reason for cessation of OPV even before interruption of wild poliovirus circulation will be presented to thwart the perceived threat from cVDPV to the developed countries.

Can these developing countries afford IPV exclusively for polio eradication? Huge amounts of money and manpower have been spent during these eleven years (1995-2005) of pulse polio immunization, still India has not become polio free. Had this amount and manpower been spent on improving the sanitation facilities it would have drastically brought down the incidences of polio, typhoid and hepatitis A and hepatitis E infections along with many other gastrointestinal diseases.

Thus, OPV may be withdrawn in future not because it had been causing VAPP in the developing countries, but, because of a perceived threat of VAPP in the developed countries.

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## **Iatrogenic Infantile Beriberi**

How a well-intended advice can sometimes lead to disaster, due to ignorance and illiteracy of mother is described here. An 8-month-old female baby from poor socio-economic background was taken to a pediatrician for an episode of diarrhea. Probably some element of lactose intolerance was suspected and therefore the pediatrician advised the mother to stop feeding milk and give rice water instead. Mother followed the advice and diarrhea was promptly controlled. Quick control of diarrhea impressed the mother and she took the advice to her heart. Thinking that rice water is superior to milk she continued to feed the baby with rice water only instead of milk.

After one month the baby was brought in emergency in a poor general condition with severe dyspnea and aphonia. On examination there were signs of congestive heart failure such as tachycardia, pedal edema, hepatomegaly, and cardiomegaly, in addition the baby was not able to cry.

Combination of congestive heart failure and aphonia lead us to suspect the possibility of infantile beriberi(1) and then corroborative feeding history was also forthcoming. Therefore, in addition to other measures, 0.25 mL of injection Beplex forte containing 22 mg thiamine (vitamin B<sub>1</sub>) was administered intramuscularly. Within 12 hr, the signs of cogestive heart failure started receding and the

cry also improved. In next 48 hr the baby recovered completely, thereafter with proper feeding advice and vitamin supplements the baby was discharged.

Polished rice is known to be deficient in thiamine, prolonged deficiency of which leads to beriberi. It is one of the life-threatening vitamin deficiency state, which promptly responds to the thiamine administration(2). Dramatic response to the thiamine administration is considered therapeutic as well as diagnostic(2).

Infantile beriberi appears to be a rare disease. There are no published case reports on infantile beriberi in Indian medical literature. In year 2004, 15 cases of infantile beriberi were reported from Israel, which were subsequently traced to a defective infant formula(3). In 2003 a very high infant mortality was recorded in Karen refugees at the border of Thailand attributable mainly to infantile beriberi(4).

This case report emphasizes the need to keep a provision of follow up for child patients who have illiterate primary caretakers.

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