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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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## Antenatal MRI in the diagnosis of Tuberous Sclerosis

Tuberous sclerosis (TS) is an autosomal dominant neurocutaneous syndrome characterized by multiorgan hamartomas, epilepsy and mental retardation. Prenatal genetic testing for a mutation is laborious, time consuming and not widely available because of the genetic heterogeneity, polymorphism and a high rate of denovo mutations(1,2). We hereby highlight the utility of prenatal magnetic resonance imaging (MRI) as an adjunctive imaging modality in the diagnosis and prognosis of TS.

An obstetrical ultrasound examination of a 24-year-old primigravida at 22 weeks of gestation showed two hyperechogenic solid masses in ventricle of the fetal heart. Fetal MRI revealed cardiac rhabdomyoma along with a subependymal tuber in the brain causing obstructive hydrocephalus. (*Fig. 1*). The couple was counseled but they wished to continue the pregnancy. The baby was delivered uneventfully at term. Postnatal echocardiography confirmed the cardiac findings and MRI brain showed multiple cortical and subependymal tumors and one subependymal congenital giant cell

astrocytoma (SEGA) which occluded the foramen of Monro causing hydrocephalus. The child had delayed neurodevelopment and multiple ash leaf macules in followup. He developed infantile spasms at 6 months and was treated with Vigabatrin. Ultrasound kidneys and fundus examination of the child and parents were unremarkable. Surgery for SEGA was suggested in view of the abnormally enlarging head size due of



*Fig 1. Sagittal view of antenatal MRI at 22 weeks showing hyperechogenic mass within ventricle of heart and subependymal tumor causing obstructive hydrocephalus simultaneously.*