

Glibenclamide can effectively attain euglycemia and obviate the need for insulin in many molecular forms of TND, as observed by us(4,5). The response to sulfonylureas may result from the closing of mutant KATP channels independent of adenosine-triphosphate, thereby augmenting insulin secretion in response to incretins and glucose metabolites(4,6).

Titration of insulin dose in these patients requires serial insulin levels and or blood glucose levels. Obtaining serial insulin levels may often be difficult in a resource limited setting. As used in our patient, C-peptide levels could be used as a surrogate marker of insulin levels and could ease dose adjustment and titration during acute phases as well as during follow up. This could obviate the need for stringent blood glucose/insulin level monitoring during switch over to sulphonylureas from insulin therapy. We emphasize the utility of C-peptide levels in titration of glibenclamide/sulfonylureas and maintenance of euglycemia, which has not been reported earlier in TND(6).

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Urban Poverty and Child Welfare

Dr Vashishtha rightly draws attention to increasing urban poverty as a “blot on our country’s shining armor”(Indian Pediatr 2009; 46:875-876). There, of course, are many other blots! Abysmal living conditions and lack of basic facilities (safe water, health care, education etc) faced by the urban poor are well-recognized, and preventable diseases, abuse and exploitation, and antisocial activities have been on the rise in metropolitan cities. The burgeoning immigration from rural areas of some of the poor states to cities has put intolerable strain on their

infrastructure. Children are the worst sufferers in such adverse conditions. Infants and young children remain abandoned and uncared for while older children are often out of school, employed in various forms of work or on the street.

Whereas IAP can do little about poverty and poor governance, it can help to tackle the problems of children in urban underprivileged communities. Basic health care and education are crucial rights of every child and must be demanded. The parents being illiterate and poor cannot take proper care of their children. That responsibility must be assumed by the community, their elected representatives and the Govt officials, who should have the onus of looking

after the sanitation, nutrition and health care and schooling of children in the underprivileged communities (urban slums, migrant clusters on the urban periphery and those at the construction sites). The necessary financial inputs should be obtained and their utilization accounted for. The Right to Education (promising free, compulsory education) is now the law of the land. It is for the community to demand and ensure that schools are made fully functional and every child is in school.

IAP can take up the policy issues of putting the responsibility of child welfare on the elected officials and Govt functionaries. Individual IAP members or groups could interact with the local officials. A nearby slum cluster or a school could be “adopted”

(or at least visited at regular intervals), the community informed about aspects of basic health problems and their management facilitated. A large number of NGOs are working for various purposes. IAP members may join hands with them and try to guide them. The enormity of the problems of children in poor communities is often daunting. Every little contribution helps, but a massive, concerted effort is needed to influence governmental policies and, more importantly, to oversee implementation of various programs.

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Vitamin B Supplementation to Prevent Neural Tube Defects?

Periconceptional folic acid is recommended for preventing neural tube defects (NTD) (1). Reports suggest that supplementation with vitamin B₁₂ is also necessary for the purpose (2). We present 2 patients with NTD, where the mothers had evidence of vitamin B₁₂ deficiency.

Case 1. A 5-month-old boy presented with significant pallor and poor feeding. He was born to a 29-year-old mother with history of previous 5 abortions (3 with fetal anomalies) and one early neonatal death. She had received supplements of folic acid 5 mg once daily before conception and continued through pregnancy. The baby, delivered at full term, had a lumbar meningocele that required surgery. The patient's hemoglobin was 3 g/dL, and the mother's hemoglobin was 9 g/dL. Their peripheral smear showed macrocytic normochromic anemia. Vitamin B₁₂ levels in the mother and baby were 136 pg/mL and 47 pg/mL, respectively (normal 200-950 pg/mL); blood levels of folate were normal. The mother was a strict vegetarian with low intake of vitamin B₁₂.

Case 2. A gravida 5, para 3 mother with 2 miscarriages and two live children, delivered a boy at 35 weeks by cesarean section, the indication being severe maternal anemia (hemoglobin level 5.1 gm/dL) and identification of a NTD in the fetus. Peripheral smear showed macrocytic normochromic anemia, vitamin B₁₂ deficiency (86 pg/mL), and normal blood levels of folate and ferritin. The baby had a thoraco-lumbo-sacral meningocele, which needed surgical intervention soon after birth. There was no history of previous NTD in the family.

In both these cases, the newborn had a neural tube defect, despite maternal folate supplementation and normal serum folate level. Both mothers were however deficient in vitamin B₁₂.

Vitamin B₁₂ is found in foods from animals (fish, meat, poultry, eggs, milk and milk products) and its deficiency is proposed as a cause of NTD (2,3). Supplementation with folic acid, as in the present cases, did not prevent the occurrence of the defects.

A large proportion of Indian population can be classified as vegetarian with dietary exclusion of all animal products. The precise role of maternal vitamin B₁₂ deficiency in occurrence of congenital anomalies and/or recurrent abortions need to be examined. Mechanisms and preventive effect of vitamin B₁₂ supplementation also needs to be studied.