ROLE OF AYURVEDIC DRUGS IN TREATMENT OF HIV INFECTION

Dear Editor,

It is estimated that over 23 million people world wide are having HIV infection and of which over 8.1 million people have developed AIDS [1]. The situation is going to be worse in coming years. India is having largest number of HIV infected cases in South Asia. Treatment of HIV infection/AIDS has been by and large symptomatic especially that of different opportunistic infections. More recently some antiretroviral agents consisting of combination of reverse transcriptase inhibitors and protease inhibitors have been found to be effective [2]. However the cost of this therapy is exorbitant and duration of treatment is uncertain. Hence search for cure of HIV infection in alternate medicine is being tried. There are few newspaper reports on effectiveness of some plants in China and India. Recently some clinical trials of ayurvedic drugs on animal models have been found to augment immunity [3]. An attempt has been made to see the effectiveness of some of Ayurvedic medicine in cases of HIV infection.

A total of 50 western blot confirmed asymptomatic HIV infection cases were taken for study at HIV surveillance centre Command Hospital (SC) Pune from Sep 95 to Dec 96. All patients were male and were divided in two equal groups of 25 cases each randomly. All patients underwent thorough general and systemic examination including weight record. All relevant routine investigation were also done to rule out associated disorders. One group of patients were given Ayurvedic drugs in consultation with physicians at Lokmanya Tilak Ayurvedic Medical College and Hospital, Pune. The ayurvedic drugs, Guduchi, Amalaki and Shatavari, considered to build general immunity, were given to all patients in this group. In addition blood letting of 60 to 100 ml on two occasions at interval of 15 days was done in these patients. Blood letting is supposed to eliminate offending wastage material in the vitiated blood. Other group of patients (Control) were given placebo. All patients were given one month supervised institutional treatment followed by two months self ad-

ministered out patients treatment. At the end of three months all patients were reassessed clinically and by repeating relevant haematological parameters.

The result of this preliminary study showed statistically significant weight gain of around 5% in 9 (36%) cases of study group. Rest of the cases in both group had static weight at the end of three months. No significant difference was found in laboratory parameters (haemoglobin estimation, absolute lymphocyte count and platelet count) among both groups. More specific parameters/markers like P24 antigen, CD4 count and HIV RNA load would have been better prognostic markers but these could not be done due to non availability during period of study.

Although our study shows weight gain in statistically significant percent of cases of study group but this alone cannot be taken as parameter of augmented immunity. We are still continuing the study with large number of cases along with parameters like CD4 count and P24 antigen test. The result of which will be published subsequently and may be more conclusive.

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VITAMIN K DEFICIENCY HEMORRHAGIC DISEASE OF NEWBORN AND PRESENT CONTROVERSIES

Dear Editor,

"The more we study the more we discover our ignorance

— Shelley Winters".

The article [1] on vitamin K in neonates and the related controversies is yet another in the series of contradictions. The following comments are offered to bring out certain points keeping in view the scenario of perinatal care in our country.

Should healthy breast fed neonates be given Vitamin K supplement at birth? Related to this question is the query-Why the current recommendation of American Academy of Pediatrics? The reasons are multiple. Transplacental passage of vitamin K is minimal with maternal to cord blood vitamin K ratio 30:1. Hepatic content of vitamin K in a neonate is 25% of adult. Vitamin K content of human milk 15 µg/L is 25% of cow's milk. Exclusively breast-fed neonates are often starved during first three days of life due to insufficient lactation.

The contrary view is as follows : Human milk offers numerous biological advantages. Despite the available evidence pertaining to hemorrhagic disease of newborn (HDN), it is difficult to comprehend that neonates fed on breast milk are predisposed to classical HDN. It is against the basic principles of nature and common sense that a readymade food produced by nature is deficient in an important nutrient and is unable to serve the nutritional needs of healthy baby

[2]. It is well known that colostrum has high content of vitamin K and it is possible that vitamin K in breast milk has enhanced bioavailability similar to other micronutrients. There are potential adverse effects of vitamin K injections. These are sepsis, transmission of hepatitis B virus and HIV infection, logistics problems, inadvertent high dose of vitamin K III (menadiolone sodium as 10 mg/ml) leading to severe hemolytic jaundice. In a population with relatively high incidence of G6PD deficiency, there is potential risk of precipitating hemolytic jaundice.

The recommendations of American Academy of Pediatrics are not uniformly followed at various centres [3]. In the light of above mentioned controversies, the following recommendations have been suggested for the prophylactic use of vitamin K to prevent HDN in neonates [4].

Early HDN : Vitamin K 20 mg daily to high-risk pregnant mothers with potential risk of fetal hemorrhage for two weeks before delivery.

Vitamin K 1.0-2.0 mg IV to neonate at birth.

Classical HDN : Vitamin K 0.5-1.0 mg IM at birth for only high risk neonates. Vitamin K 1.0-2.0 mg orally at birth for normal neonates

Late HDN : Vitamin K 1.0 mg at birth and 1.0 mg IM once a month in high risk infants